RAILROAD MAN'S MAGAZINE

For Everybody

JAN.

25¢ Canada 30¢

Right Hand Side

by Edwin C. Hill

Author of The Iron Horse

Lure of the Rails

A powerful story of the extra board

by E. S. Dellinger

The All-American Team Chooses the All-American Skate

NESTOR JOHNSON

Alfred M. "Freddy" Dion
Clarkson Tech, right defense
"JOHNSONS are the best skates I have ever used. The shoes give my feet perfect support and always keep my ankles firm and steady. I have such confidence in my JOHNSONS that I never need give them a thought during a game."—Alfred M. Dion.

"Molly" Bott
Dartmouth, goalie
"JOHNSONS certainly are topnotchers. They fit so perfectly and have such wonderful balance that they actually feel like part of your feet. I'd be lost without my JOHNSONS."—Molly Bott.

Donnie McFadyen
Marquette, center
"My game has improved greatly since I started to use JOHNSONS. Goals come easier, skating is faster, and I feel more at home on the ice. There is something about the runners . . . a lifelike feeling . . . that cannot be found in any other skate."— D. M. McFadyen.

There's no argument. The All-American Hockey Team unanimously selects JOHNSONS as the All-American Skates. A great tribute from great skaters, but JOHNSONS richly deserve it. They have made the game of hockey what it is today—"lightning on ice."

Years ago, Nestor Johnson perfected the first pair of tubular skates ever made in the United States or Canada. Almost overnight these new skates took the country by storm. They were lighter, handier . . . had more life and vitality than the old style flat steel skates. They revolutionized skating . . . made it a finer, faster, safer sport. Hockey and racing took on lightning-like speed. Ordinary ice skating rose to new heights of popularity.

Today JOHNSONS are the finest skates you can buy. They give the proper support to your ankles and arches. And you will be really surprised to find how much easier it is to skate on genuine JOHNSONS. The fine Vanadium Tool Steel Runners . . . "Diamond Tested" to prove hardness . . . have a sharp, razor-like edge that makes skating a new pleasure. **To get this wonderful skating, be sure to ask for and insist upon the original and genuine JOHNSON Skates and look for the full name NESTOR JOHNSON.**

Bobby Giddens
Harvard, right wing
There is a ruling at Harvard which prohibits undergraduates from publicly endorsing a product. However, it is known that Bobby Giddens regards JOHNSONS as the real All-American skates.

W. H. "Ding" Palmer
Yale, left wing
Yale, too, prohibits endorsement of products. But it goes without saying that Ding Palmer knows that no other skates can take the place of JOHNSONS on the hockey rink.

John G. Jones
Princeton, left defense
"My JOHNSONS are my best friends. 'Wings of Steel' certainly describes them accurately. You can easily tell that the runners are made of the finest Vanadium steel by the way they take hold of the ice. And I have found that they stay sharp longer than other skates. JOHNSONS never fail a hockey player."—John G. Jones.

There is only ONE JOHNSON skate . . . to be sure of the genuine, look for the full name NESTOR JOHNSON

JOHNSONS are made in Hockey and Racer styles for boys and girls, men and women. Hockeys for general skating; Racers for speed skating.

NESTOR JOHNSON NORTH STAR
Aluminum Finish, with shoes $10.00 per pair
Nickel Plated, with shoes $12.00 per pair

NESTOR JOHNSON FLYERS
Aluminum Finish, with shoes $7.50 per pair
Nickel Plated, with shoes $8.50 per pair

The Collegiate
(with hard toes)
Aluminum Finish, with shoes $10.00 per pair
Nickel Plated, with shoes $11.00 per pair

NESTOR JOHNSON MFG. CO.
1905 N. Springfield Ave., Chicago, Ill.

Please send this year's catalog showing the complete line of JOHNSONS.

Name .....

Address .....

City ..... State .....

KC

If You Were DYING TO-NIGHT

and I offered you something that would give you ten years more to live, would you take it? You'd grab it. Well, fellows, I've got it, but don't wait till you're dying or it won't do you a bit of good. It will then be too late. Right now is the time. Tomorrow or any day, some disease will get you and if you have not equipped yourself to fight it off, you're gone. I don't claim to cure disease. I am not a medical doctor, but I'll put you in such condition that the doctor will starve to death waiting for you to take sick. Can you imagine a mosquito trying to bite a brick wall? A fine chance.

A Re-built Man

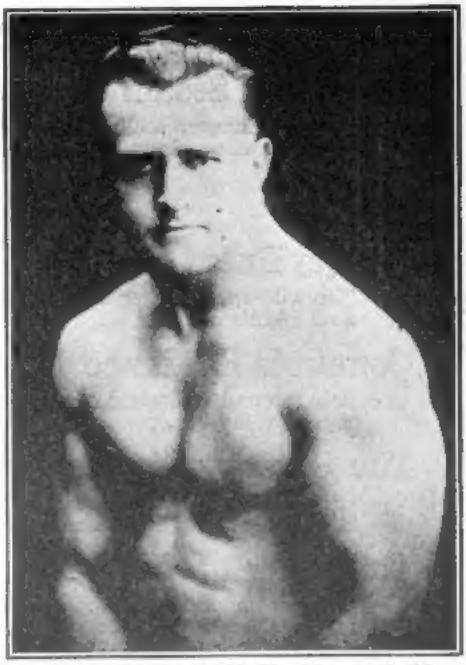
I like to get the weak ones. I delight in getting hold of a man who has been turned down as hopeless by others. It's easy enough to finish a task that's more than half done. But give me the weak, sickly chap and watch him grow stronger. That's what I like. It's fun to me because I know I can do it and I like to give the other fellow the laugh. I don't just give you a veneer of muscle that looks good to others. I work on you both inside and out. I not only put big, massive arms and legs on you, but I build up those inner muscles that surround your vital organs. The kind that give you real pep and energy, the kind that fire you with ambition and the courage to tackle anything set before you.

All I Ask Is Ninety Days

Who says it takes years to get in shape? Show me the man who makes any such claims and I'll make him eat his words. I'll put one full inch on your arm in just 30 days. Yes, and two full inches on your chest in the same length of time. Meanwhile I'm putting life and pep into your old back-bone. And from then on just watch 'em grow. At the end of thirty days you won't know yourself. Your whole body will take on an entirely different appearance. But you've only started. Now comes the real work. I've only built my foundation. I want just 60 days more (90 in all) and you'll make those friends of yours who think they're strong look like something the cat dragged in.

A Real Man

When I'm through with you, you're a real man. The kind that can prove it. You will be able to do things that you had thought impossible. And the beauty of it is you keep on going. Your deep full chest breathes in rich pure air, stimulating your blood and making you just bubble over with vim and vitality. Your huge, square shoulders, and your massive muscular arms have that craving for the exercise of a regular he man. You have the flash to your eye and the pep to your step that will make you admired and sought after in both the business and social world.



EARLE LIEDERMAN, The Muscle Builder

Author of "Muscle Building," "Science of Wrestling," "Secrets of Strength," "Here's Health," "Endurance," Etc.

This is no idle prattle, fellows. If you doubt me, make me prove it. Go ahead. I like it. I have already done this for thousands of others and my records are unchallenged. What I have done for them I will do for you. Come then, for time flies and every day counts. Let this very day be the beginning of new life to you.

SEND FOR MY NEW 64-PAGE BOOK

"Muscular Development"

IT IS FREE

It contains forty-eight full-page photographs of myself and some of the many prize-winning pupils I have trained. Some of these came to me as pitiful weaklings, imploring me to help them. Look them over now and you will marvel at their present physiques. This book will prove an impetus and a real inspiration to you. It will thrill you through and through. This will not obligate you at all, but for the sake of your future health and happiness do not put it off. Send today—right now before you turn this page.

EARLE LIEDERMAN
Dept. 4101, 305 Broadway, New York City

EARLE LIEDERMAN,
Dept. 4101, 305 Broadway, New York City

Dear Sir: Please send me without any obligation on my part whatever a copy of your latest book, "Muscular Development." (Please write or print plainly.)

Name..... Age.....

Street.....

City..... State.....

RAILROAD MAN'S

JANUARY, 1930

Serials

Lure of the Rails (Two Parts—Part 1) By E. S. Dellinger 172

Black hate and the "extra board" were combined to lick Oscar Kimpton until love and devotion to duty dealt a new hand from the deck.

Blood and Steam (Four Parts—Part 2) By Don Waters 278

Strange dangers stalk the main line and yard as a mountain feud follows Joe Allen, fireman, from the hills to the Slabtown branch.

Short Stories

Moxley Puts One Over By Robert Fulkerson Hoffman 194

The wild-eyed hogger on Rock Rampart Slope dove to a paint-scorching meet as a joker's whim.

Complete Evidence By Rufe Gable 220

A lone number flashed over the wires at midnight solved the mystery of the merchandise loot.

The Country Station Agent By J. E. Smith 262

Being the observations of one, Luther Leghorn, whose loose change at Lone Oak instigated a mad man-hunt.

That Speck o' Human By Joe Bledsoe 271

Bo and Shack match wits and nerve to defend the railroad property from the invasion of an outlaw gang.

Features

Right-Hand Side By Edwin C. Hill 161

John Draney, Lackawanna senior engineer, has seen much of railroad history from the window of a cab and, in overalls, has walked with the great.

This Passenger Business By Franklin Snow 210

A talk about varnished wagons and what the railroads universally are doing to hold the bulk of passenger travel against all comers.

THE FRANK A. MUNSEY COMPANY, 280 Broadway, New York, and

LONDON: HACHETTE & CIE., 16-17 King William Street, Charing Cross, W.C.2

PARIS: HACHETTE & CIE., 111 Rue Réaumur

WILLIAM T. DEWART, President

C. T. DIXON, Vice President

PUBLISHED EVERY MONTH AND COPYRIGHT, 1929, BY THE FRANK A. MUNSEY COMPANY

Single copies, 25 cents. By the year, $2.50 in United States, its dependencies, Mexico and Cuba; $4.00 to Canada and Foreign Countries. Remittances should be made by check, express money order or postal money order. Currency should not be sent unless registered

Entry as second-class matter is pending

The entire contents of this magazine are protected by copyright, and must not be reprinted without the publishers' permission

TITLE REGISTERED IN U. S. PATENT OFFICE

COPYRIGHTED IN GREAT BRITAIN

F0

MAGAZINE

VOL. 1 No. 2

A MAGAZINE FOR EVERYBODY

Coupling Up By Charles Frederick Carter 233

From link and pin to now in the history of automatic couplers, with an intimate glimpse into the hardships of the not-so-good old days.

Hard Rock Romance By Katherine Louise Smith 247

Boring the world's great tunnels that passenger and freight traffic may be better and more economically served.

True Experiences

My Greatest Thrill 306

One Night of Terror By Jacques Girourard

Two trains down for meet in the dark and the operator can't remember if the orders were mixed.

Thrilled by a Voice By Charles Frederick Carter

It took the yell of a boomer brakeman to scatter a slumbering work train crew in the face of a sweeping headlight.

Departmental and Miscellany

By the Light of the Lantern 207

"Snakes" (A Poem) By Bob Crabb 232

The Tunnel Builders (A Poem) By Norman H. Crowell 261

On the Spot With the Editors 314

The February Consist

"I REMEMBER WHEN—" *By* VICTOR MAXWELL — A gripping novelette of railroading in the snow hazards of the great northwest

---

"RAILROADING THE CIRCUS" *By* JOHN WILSTACH — How the big top travel went through the transition from the road wagons to fancy rolling stock

---

Also Great Stories and Features by

J. E. SMITH JOHN ADAMS DON WATERS E. S. DELLINGER

EDWARD HUNGERFORD *and Others*

FC

Genuine

UNDERWOOD

Below ½ Price

NOW ONLY $1 DOWN

Standard 4-Row Keyboard

Think of it! Only $1.00 brings the World's most famous Underwood Typewriter for 10 days' free trial. Lowest price and easiest terms ever offered. Pay only 10c a day on easy monthly payment plan. This is the full size standard Underwood 4-row keyboard typewriter, manufactured to sell for $100.00.

Do not confuse this 4-row standard office model Underwood with other trail machines originally costing only one-half as much.

Typewriting Course FREE

We teach you free. Complete Home Study Course of the famous Van Sant Speed Typewriting System, fully illustrated, easily learned, used in schools, business offices, everywhere.

Easy Terms
10 Day FREE Trial

This late model Underwood, specially priced at $39.90 (cash) is the lowest price ever quoted; has modern improvements, including 4-row keyboard, two-color ribbon, back spacer, ribbon reverse, tabulator, release, shift lock and many other improvements. Beautifully refinished and renewed. Looks and operates like brand new.

SEND AT ONCE!

This exceptional bargain offer is for a very limited time only. Remember—every one of these famous Underwoods is *fully guaranteed* and shipped on 10 days Free Trial. Send at once.

International Typewriter Exchange
231 West Monroe Street, Chicago, Ill. Dept. 134

I enclose $1 deposit. Send Underwood No. 4 at once for 10 day Free Trial. If I am not perfectly satisfied I can return it Express Collect and get my deposit back. If I keep it I will pay $3 a month until I have paid $44.90 in full.

Name.....Age.....

Address.....

Town.....State.....

CLASSIFIED ADVERTISING

The Purpose of this Department is to put the reader in touch immediately with the newest needfuls for the HOME, OFFICE, FARM, or PERSON; to offer, or seek, an unusual BUSINESS OPPORTUNITY, or to suggest a service that may be performed satisfactorily through correspondence. It will pay a housewife or business man equally well to read these advertisements carefully.

RATE—$1.50 per Line

HELP WANTED—MALE

FIREMEN, BRAKEMEN, BAGGAGEMEN (WHITE OR COLORED), SLEEPING CAR, TRAIN PORTERS (COLORED), $150—$250 MONTHLY. EXPERIENCE UNNECESSARY. 305 RAILWAY BUREAU, EAST ST. LOUIS, ILL.

GONE Often In 3 Days Time

If You are Troubled With: PIMPLES, BLACKHEADS, FRECKLES, TAN, LARGE PORES, DRY SKIN, SCALES, OILY SKIN, BLOTCHES, BLEMISHES, WRINKLES, WRITE FOR FREE "BOOK" TODAY. Explains in full detail how you can definitely get rid of your "Terrible Skin Conditions" and how you can obtain a "Beautiful New Skin In Three (3) Days." Learn about the new amazing German discovery that has revolutionized the Beauty Culture Profession. Don't delay. Write for Free Book Today. Address MARVO, 1700 Broadway, New York City, Dept. 386.

NOWHERE ELSE can be found such infinite variety as in *Argosy*. Stories of all dimensions—serials, novelettes, shorts—and of varied types—adventure, business, war, Western, romance, sport, different, domestic.

WHAT EVERY ELECTRICIAN WANTS TO KNOW!

is easily found in AUDELS NEW ELECTRIC LIBRARY. Electricity made simple as ABC. Up-to-date, trade dope for the expert and ALL electrical workers.

Questions, answers, diagrams, calculations, underwriter's code; design, construction, operation and maintenance of modern electrical machines and appliances FULLY COVERED.

All available at small cost, easy terms. BOOK-A-MONTH service puts this NEW information in your hands for 6c a day.

Write TODAY for Electric Folder and FREE TRIAL offer.

Theo. Audel & Co. 65 W. 23rd St. New York, Dept. 18

Make $100 a Week!

GET PAID DAILY—EXTRA CASH BONUS

I'll give you your own business. Won't cost you a penny. Make big money showing famous all-wool, tailored-to-measure suits, $23.50 up. Daily commissions, liberal bonus. Supervalues, guaranteed fit, mean easy orders, steady customers. No experience required. FREE outfit. 200 all-wool fabrics. Union tailoring. Write, give experience and age.

ALL-WOOL Suits $23.50

W. Z. Gibson, Inc., 500 Throop St., Dept. N-475, Chicago

MYSTIC LUCKY RING

BE LUCKY—Have money, friends, sweethearts. Win at games, business, love. This Mystic ring symbolizing 7 emblems of Good Luck is said to have Magic Power to bring you health, wealth and happiness. A Sure Winner. Looks like genuine black onyx with white gold inlay. Odd attractive ring for man or woman. *Send No Money*—just ring size. Pay postman $1.98 plus postage. Satisfaction guaranteed. Or send $1.98 and we pay postage.

K.A.75 HILL, 2626 Washington Blvd., CHICAGO, ILL.

FD

SWAN'S
HOME OF THE
WE BUY, SELL

...Raised His Pay $4800* After Reading This Amazing Book Which Is Now *FREE!*

*Based on the combined experiences of F. B. Englehardt, Chattanooga, Tenn.; A. F Thompson, Sioux City, Iowa; L. D. Mathers, of E. Cleveland, Ohio, and many others.

Caught in a Rut

I wonder I put up with it as long as I did! Every day was filled with nothing but deadly routine and monotonous detail. No freedom or independence. No chance to get out and meet people, travel, nor have interesting experiences. I was just like a cog in a big machine with poor prospects of ever being anything more.

Long, Tiresome Hours

Every hour of the day I was under somebody's supervision. The TIME-CLOCK constantly laid in wait for me—a monument to unfulfilled hopes and dying ambition. Four times a day, promptly on the dot, it hurled its silent challenge at my self-respect, reminding me how unimportant I was and how little I really COUNTED in the business and social world!

Low Pay

Paid just enough to keep going—but never enough to enjoy any of the GOOD things of life every man DESERVES for his family and himself. Always economizing and pinching pennies. Always wondering what I would do if I were laid off or lost my job. Always uncertain and apprehensive of the future.

Desperate

Happened to get a look at the payroll one day and was astonished to see what big salaries went to the sales force. Found that salesman Brown made $200 a week—and Jenkins $275! Would have given my right arm to make money that fast, but never dreamed I had any "gift" for salesmanship.

A Ray of Light

Stumbled across an article on salesmanship in a magazine that evening. Was surprised to discover that salesmen were made and not "born" as I had foolishly believed. Read about a former cowpuncher, Wm. Shore of California, making $535 in one week after learning the ins-and-outs of scientific salesmanship. Decided that if HE could do it, so could I!

The Turning Point

My first step was to write for a certain little book which a famous business genius has called "The MOST AMAZING BOOK EVER PRINTED." It wasn't a very *big* book, but it certainly opened my eyes to things I had never *dreamed* of—and proved the turning point of my entire career!

What I Discovered

Between the pages of this remarkable volume, I discovered hundreds of little known facts and secrets that revealed the REAL TRUTH about the science of selling! It wasn't a bit as I had imagined. I found out that it was governed by simple rules and laws that almost ANY man can master as easily as he learned the alphabet. I even learned how to go about getting into this "highest paid of all professions!" I found out exactly how Mark Barichievich of San Francisco was enabled to quit his $8 a week job as restaurant-worker and start making $125 a week as a salesman; and how C. W. Birmingham of Dayton, Ohio, jumped from $15 a week to $7500 a year—these and *hundreds* of others! It certainly was a revelation!

FREE Employment Service

Furthermore, I discovered that the National Salesmen's Training Association, which published the book, also operates a most effective employment service! Last year they received requests from all over the U. S. and Canada for more than 50,000 salesmen trained by their method. This service is FREE to both members and employers and thousands have secured positions this way!

Making Good At Last!

It didn't take me long to decide to cast my lot with N. S. T. A.—and after a few weeks I had mastered the secrets of Modern Salesmanship during spare time, without losing a day or a dollar from my old job. When I was ready, the Employment Manager found me over a dozen good openings to choose from—and I selected one which paid me over $70 a week to start!

Was It Worth It?

Today my salary is $4800 greater than ever before! No more punching time-clocks or worrying over dimes and quarters! NOW my services are in REAL DEMAND with bigger prospects for the future than I ever dared HOPE for back in those days when I was just another "name" on a pay-roll!

GET YOUR COPY FREE

Right now the book—"The Key to Master Salesmanship"—which banished all my fears and troubles and showed me how to get started on the road to success and independence—will be mailed as a gift to any ambitious man, absolutely FREE. And since there is no obligation, why not see for yourself what amazing facts it contains! Just mail the coupon now—for there is no better way in the world to invest a 2-cent stamp! I KNOW!

NATIONAL SALESMEN'S TRAINING ASSOCIATION
Dept. A-952, N. S. T. A. Bldg., Chicago, Ill.

National Salesmen's Training Assn., Dept. A-952, N. S. T. A. Bldg., Chicago, Ill.

Without obligation, please send me a free copy of "The Key To Master Salesmanship."

Name..... Address.....

Town..... State.....

Age..... Occupation.....

FE

New Million Dollar CAN OPENER

No More Stabbing and Hacking! Just a Twist-of-the-Wrist opens Square, Round or Oval Cans.

Brings Fortunes to Agents—$6 to $12 IN AN Hour

Full or Spare Time

IMAGINE a little automatic machine that opens any shape can, round, square or oval, in a couple of seconds at a mere twist of the wrist! Holds the can for you, and cuts out the entire top, slick, smooth and clean, **inside the rim**—juices can't spill! No jagged edges to snag your fingers. All food pours right out without scraping or spooning! No wonder Speedo representatives often sell to every house in the block and make up to $12 an hour! J. Williamson, Wisc., made $5 his first hour. Mrs. Spain, Kans., made $9 her first afternoon. Duncan, Mont., cleaned up $17 his first day. Ornoff, Va., $522 his first month. You, too, can make big money with Speedo.

Write for Demonstrator

Whether you have ever sold anything before or not, learn the facts about this new wonder worker. We furnish everything including most novel demonstration outfit you ever saw. No experience needed. Not sold in stores. Three special selling plans for full-time or part-time workers. Act at once and you can test your profits FREE!

FREE Offer

CENTRAL STATES MANUFACTURING CO.
Dept. A-2893, 4500 Mary Avenue, St. Louis, Mo.

Central States Mfg. Co., Dept. A-2393
4500 Mary Ave., St. Louis, Mo.

Rush me facts and details of your Free Test Offer.

Name.....

Address.....

Town..... State.....

( ) Check here if you only want one for your home.

Here's Money to Pay Your Grocery Bills

—AN AMAZING CHANCE TO MAKE

$15 a Day

Send me your name and I'll show you how to get plenty of money to pay your grocery bills—a wonderful chance to make $10 to $15 in a day. Van Allen reports $125 profits in one week. Mrs. Herkelt, $35 in 2 hours. Think of the possibilities! And now I am ready to offer you an even better proposition.

FORD FREE TO PRODUCERS

You don't need capital or experience. I show you how to make big money—full time or spare time. I also offer you a brand-new Ford Tudor Sedan as an extra bonus—in addition to your large cash profits. Send no money—just your name. Write today.

Albert Mills, Pres., 6525 Monmouth Ave., Cincinnati, O.

One Penny-A-Day Pays $100.00

a month for 24 full months in case you are disabled and up to $7,500.00 in the event of death—all for the cost of only one penny a day. The Sterling Casualty Insurance Co., 75 E. Wacker Drive, Chicago, Ill., a financially responsible company, backed by nationally known bankers and business men, and under State Supervision, is now issuing a remarkable accident policy costing only $3.65 for a full year and popularly known as the Sterling Penny-A-Day Accident Policy. All accidents covered. Everyone eligible. No medical examination required. Claims settled promptly by mail. If you wish to inspect this policy FREE, without obligation, send your name, address, age, beneficiary's name and relationship (no money) to Dept. 508 of this company, and a policy and literature will be sent you.—Adv.

Send 10 Cents

and receive a copy of the ARGOSY, an All-Fiction Magazine that gives you many hours of entertainment.

MUNSEY COMBINATION, Dept. R-1, 280 Broadway, N.Y.

RUPTURE IS NOT A TEAR

Your physician will tell you that hernia (rupture) is a muscular weakness in the abdominal wall.—Do not be satisfied with merely bracing these weakened muscles, with your condition probably growing worse every day!—Strike at the real cause of the trouble, and

WHEN—

The weakened muscles recover their strength and elasticity, and—
The unsightly, unnatural protrusion disappears, and—
You recover your vim, vigor and vitality,—your strength and energy,—and you look and feel better in every way,—and your friends notice the difference,—

THEN—

You'll know your rupture is gone, and
You'll know why for almost a quarter of a century numerous sworn statements report complete recovery and freedom from uncomfortable mechanical supports, without delay from work.

SEND NO MONEY

A Test of the scientific self-treatment mentioned in coupon below is now available to you, whether you are young or old,—man or woman. It costs you nothing to make this test.—For your own good mail the coupon NOW—TODAY.

FREE TEST COUPON

Plapao Laboratories, 805 Stuart Bldg., St. Louis, Mo.

Send me a Free 10 day test supply of the remedial factor Plapao and 48-page illustrated book on Rupture; no charge for this now or later.

Name.....

Address.....

FF

1000 HOTEL POSITIONS OPEN!

BE A HOTEL MANAGER

Hotels, clubs, apartment hotels everywhere are calling for managers, etc. Splendid salaries, fine living, luxurious surroundings for you!

HOTELS, restaurants, clubs, apartment hotels, hospitals, institutions, schools and colleges everywhere need trained men. Over 70,000 positions paying $2,500 to $10,000 a year open annually in hotels of the United States. Nearly one and three quarter billions of dollars' worth of NEW HOTELS, APARTMENT HOTELS, CLUBS and INSTITUTIONS being built this year will need over 200,000 trained men. Hotels start you at salaries up to $3,500 a year, with living usually included.

Previous Experience Unnecessary

You can have one of these fascinating, big-pay positions. Then our Simplified Home Study Plan we give you the valuable knowledge that it has taken successful hotel men years to obtain. Age is no obstacle—young and old alike have equal chance for success. A common school education is all you need.

We Put Our Students in Touch With Positions

We train you and put you in touch with big opportunities. All of your training under the personal supervision of Clifford Lewis, who has been appointed Managing Consultant by over 200 hotels thruout the United States. Our students employed by leading hotels everywhere.
Send today for Free Book, "Your Big Opportunity," showing how we can train you for one of these splendid positions, and explaining our Money-Back Agreement.

LEWIS HOTEL TRAINING SCHOOLS
Room CA-7501 CLIFFORD LEWIS, President Washington, D. C.
The Original and Only School of Its Kind in the World

Proof!

That files are crammed with letters like these, which prove that the hotel industry is the field of big opportunity today.

R. N. Kinz:—"Yesterday I took over the duties of Assistant Manager. Coincidentally, it was one year to the day that I registered in your Schools. These facts would not have resulted had I not had the benefit of your course."

Stanley S. Besore:—"I am now employed as Manager. Your schools are well known here and your training is sufficient recommendation for one to secure a hotel position."

EARN $2,500 TO $10,000 A YEAR

OPPORTUNITY COUPON

Lewis Hotel Training Schools,
Room CA-7501, Washington, D. C.
Send me the Free Book, "YOUR BIG OPPORTUNITY," without obligation.

Name.....
Address.....
City..... State.....

Send 10 Cents

and receive a copy of DETECTIVE FICTION WEEKLY—a magazine full of thrilling detective stories.

RED STAR NEWS CO., Dept. R-1, 280 Broadway, N. Y.

PANTS MATCHED TO ANY SUIT—FREE SAMPLE

DON'T DISCARD YOUR OLD SUIT. Wear the coat and vest another year by getting new trousers to match. Tailored to your measure. With over 100,000 patterns to select from we can match almost any pattern. Send vest or sample of cloth today, and we will submit FREE best match obtainable.

AMERICAN MATCH PANTS CO.
Dept. E.P. 6 W. Randolph St., Chicago, Ill.

STANDARD AND BEST RAILROAD BOOKS

We publish a complete line of Locomotive and Railroad books used for examination purposes on nearly every Railroad. These books contain thousands of questions with their answers, used by prominent Railroads in examining firemen and engineers for employment and promotion.

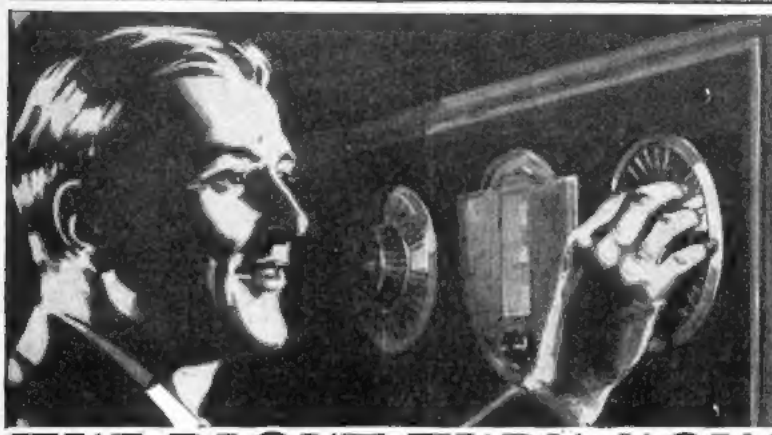
UP-TO-DATE AIR BRAKE CATECHISM—Blackall & Parke	$4.00
LOCOMOTIVE CATECHISM—Robert Grimshaw, M. E.	4.00
WESTINGHOUSE E. T. AIR BRAKE POCKETBOOK—Wm. W. Wood	2.50
LINK MOTIONS, VALVE GEARS AND VALVE SETTING—Colvin	.75
LOCOMOTIVE BREAKDOWNS AND THEIR REMEDIES—Geo. Fowler	1.50
LOCOMOTIVE BOILER CONSTRUCTION—Frank A. Kleinhans	3.50
WALSCHAERT LOCOMOTIVE VALVE GEAR—Wm. W. Wood	2.50
PREVENTION OF RAILROAD ACCIDENTS—George Bradshaw	.50
DIARY OF A ROUNDHOUSE FOREMAN—T. S. Reilly	1.25
COMBUSTION OF COAL—Wm. M. Barr	1.50
AIR BRAKE CATECHISM—Spanish Edition	*8.00*

AGENTS WANTED We want agents to represent us and sell our railroad and other books at every Round House and Terminal on every road. Our catalog describing our complete line of railroad and books on 50 other subjects is sent FREE on request.

AGENTS PRICES We allow 30% off the retail price to agents. Why not order at once one or more of these railroad books at the special agents prices, and begin NOW to get orders from your friends. We will send books C. O. D. if desired.

NORMAN W. HENLEY PUBLISHING COMPANY Dept. R.M., 2 West 45th Street, New York

R. T. I. R. T. I. QUALIFIES YOU TO MAKE MONEY AND ITS SERVICE KEEPS YOU UP-TO-THE-MINUTE ON THE NEWEST DEVELOPMENTS IN RADIO, TELEVISION AND TALKING PICTURES **R. T. I.**



RADIO FOREMEN

Large radio factory has opening for several foremen thoroughly experienced on chassis assembly work. Will make interesting proposition to right man.

ADDRESS—G Y 138, Tribune

RADIO FINAL SET TESTER.

Splendid opportunity for young man with thorough knowledge of radio, to handle final set test in production line.

CALVEN MFG. CORP., 847 W. Harrison-st.

RADIO SERVICE MAN.

Must be capable of servicing and installing per make of radio. Apply Mon. or Tues. between 9-11 a. m.

642 N. Michigan-ave.

RADIO TESTERS

and helpers, experienced on A. C. sets; unusual pay for men who qualify. Call Smith, Glenwood 0093, or apply Silver-Marshall, Inc., 6101 W. 65th-st.

THE RIGHT TURN NOW BRINGS BIG-MONEY JOBS

and lifetime success in the newest and fastest growing industry in the world

RADIO

The great new infant Radio industry continually outgrows the supply of trained men for its needs. Therefore, R. T. I. is seeking hundreds of earnest, ambitious men to train to fill the jobs that lead to $2500—$3500—$5000 a year and up. Spare-time work too is waiting everywhere—thousands of dollars to be made easily, quickly, in every part of the country.

TELEVISION

Now comes Television out of the experimental radio laboratory on the verge of another vast demand for men who are qualified to expand it and the R. T. I. "3 in 1" Home Training in Radio, Television and Talking Pictures offers you big opportunity in this magic new field.

TALKING PICTURES

The vast sweep of Talking Pictures through the larger cities is about to cover the country, creating more and more jobs that must be filled by men with such training as R. T. I. gives

R.T.I. Famous "3 in 1" Home Training Radio—Television—Talking Pictures

Qualifies you easily, quickly and surely for Big-Pay Jobs in RADIO or either of its new and fast-growing sister industries—TELEVISION and the TALKING PICTURES. Your age or previous experience do not matter.

F. H. Schnell

Let F. H. Schnell and the R.T.I. Advisory Board Help You

Mr. Schnell, Chief of the R. T. I. Staff, is one of the ablest and best known radio men in America. He has twenty years of Radio experience. He was the first to establish two way amateur communication with Europe. Former Traffic Manager of American Radio Relay League. Lieutenant Commander of the U. S. Naval Reserve. Inventor and designer of Radio apparatus. Consultant Engineer to large Radio manufacturers.

Assisting him is the R. T. I. Advisory Board, composed of men prominent in the Radio industry—manufacturing, broadcasting, engineering and servicing. All these men know Radio and will help you succeed in their field.

START AT HOME Quick Money NOW

To meet the great demand for trained men from the new Radio, Television and Talking Picture field, R. T. I. with the help of its connections in the industry, has built up an easy, learn-at-home practical plan that will prepare you for these good jobs. You use fine testing and working outfits and learn by Work Sheets and the invaluable R. T. I. Job Tickets prepared by men who know. It's easy because clearly explained so you can do it—yet it is practical, scientific, and makes you an expert. R. T. I. starts you making money right at home and keeps stepping you up and up in the Big-Pay class.

NOW is the time

Never before in the history of the world has there been such opportunity for ambitious men. These great industries offer Big-Money Jobs—money-making without limit—all available to men and boys who are far-seeing enough "to get in on the ground floor"—right now—and R. T. I. makes it easy for you to get in. Send for the big Free R. T. I. book.

Makes $25 a Day
Floyd Knisely, Box 91, St. Joe, Ind.

$500 Extra in Two Months
J. Noffsinger, R. 1, Box 87, Greensville, Ky.

$60 a Week—Now a $10 Raise
Fred E. Klemann, Box 8, Lisle, Ill.

Big R.T.I. Book FREE Now —Use the Coupon!

Just fill in the coupon. Our wonderful FREE book "Tune In On Big Pay." There is no other book like it. You will be startled with its thrilling pages—its amazing photographs—overwhelming evidence of the incomparable money-making opportunities for you in Radio—RIGHT NOW! Send for it immediately.

RADIO & TELEVISION INSTITUTE
Dept. 671
4806 St. Anthony Court, Chicago

It's Your Turn NOW

RADIO & TELEVISION INSTITUTE
Dept. 671, 4806 St. Anthony Court, Chicago

Send me Free and prepaid your BIG BOOK "Tune In On Big Pay" and full details of your three-in-one Home Training (without obligating me in any way).

Name .....

Address .....

City ..... State .....

R. T. I. R. T. I. TRAINS YOU AT HOME FOR A GOOD JOB OR A PROFITABLE PART TIME OR FULL TIME BUSINESS OF YOUR OWN

FH

Photo by Bachrach

JOHN DRANEY
Senior Engineer, Lackawanna Railroad

RAILROAD
MAN'S MAGAZINE
Vol. 1 For Everybody No. 2
JANUARY, 1930

Right-Hand Side

John Draney, Locomotive Engineer, Has Seen Railroad History in His Span, and, in Overalls, Has Walked With the Great

By Edwin C. Hill

Author of "The Iron Horse"

ONE day, in the year 1873, Ulysses S. Grant, President of the United States, came up from Washington to New York, and got off his train at the Pennsylvania Terminal in Jersey City. There must have been five thousand people in the station crowd that greeted him—all sorts, rich and poor, high and low, young and old

General Grant, short, stocky, unimposing, walked down the station platform, chewing the end of a half smoked cigar. He went his way steadily, acknowledging the hand clapping and the hurrahs of the crowd by short, brief gestures, until he reached the locomotive—the funny locomotive of those days, with a name painted on the side of the engine cab and a smokestack shaped like a top, and as big as a whisky barrel. He stopped short at the steps of the locomotive cab, looked up at the soot-grimed, smiling face in the window, and reached up his hand. The President of the United States was taking all that trouble to shake hands with a plain locomotive engineer

In the very forefront of the throng that stared pop-eyed at this little drama was a boy of twelve, whose father, a Lackawanna section hand, had brought him to Jersey City expressly for the purpose of letting him see the President of his country. The youngster himself was in the service of the Delaware, Lackawanna and Western in the humble but necessary employment of water boy. He fidgeted in the front of the crowd that day, his mouth gaping while the greatest man in the nation gripped fingers with the fellow in overalls who ran the train.

Right then and there Johnny Draney

made up his mind what his career was going to be. He was not interested in becoming President of the United States, but it certainly would be worth while to become a man with whom Presidents are so glad to shake hands.

John P. Draney made that decision fifty-six years ago, and to-day, when you ride the Lackawanna Limited eastward, from Scranton to Hoboken, or No. 1 westward, and take the trouble, before you board your Pullman car, to have a look at the man on the right-hand side of the cab, you will see this same John P. Draney, star engineer of the road, driver of its crack train, forty years an engineer and more than fifty-six years in service. There are, perhaps, engine drivers swishing around loose over the tremendous expanse of this land, and upon the lines of its three hundred thousand miles of railroad, who have served even longer and seen even more than he, but his life has been picturesque enough and thrilling enough for any man to live.

He Has Never Lost a Life

In his forty years as an engineer he has driven his iron horse more than two million miles, but he never lost a life, he never had a passenger injured, and he never had a derailment. Possibly this record can be matched, possibly not. There are no heroics about Engineer Draney of the Lackawanna Limited. There is no strut or swagger or pose about him. He has no use for bunk and braggadocio. Like the great general whom he saw shaking hands with the Pennsylvania engineer on that morning in 1873, he is not much given to words. Indeed, a clam is chatty compared to John P. Draney when it comes to talking about his personal experiences and exploits.

Yet there is always a story in such men. They need not have accomplished wonders, they only need to have done their duty. It is often the years through which they have lived, the cycles of their lives and times, that make them such arresting figures. The service of this crack engineer of the Lackawanna has covered the particular sweep of history that witnessed not only the almost unbelievable evolution of the railroads of America, but the equally incredible development of the country itself

The evolution of the United States, from the Civil War on, was rendered possible only by the enormous improvements in the science and art of railway transportation which the managers of our American railways have achieved. With all of this Engineer Draney was concerned. Part of it he has been, and almost all of it he has seen.

Nowhere else in the world have comparable results been achieved. The railroad men of America have been pioneers in fields which they made exclusively their own; and this has been true through all classes of railroad men, from the great financial executives to the track foremen, the master mechanics, the engineers, and even the firemen and trackmen.

The salient features of the evolution of railroading which John P. Draney has witnessed were the addition of multiple tracks; the strengthening of roadbeds and bridges to enable the use of heavier rails, heavier locomotives and bigger cars; the reduction of grades and curves; the electrification of long stretches of line; the tremendous improvement of terminal facilities, and the introduction of innumerable comforts and luxuries for the traveling public — all of which have

changed railroad traveling from a dreary, uncomfortable experience to a safe and pleasant adventure. Engineer Draney has seen his country grow up as not every man of his time and generation has seen it—and this because he has played such an essential part in the forces that have made for prosperity and expansion; that have moved powerfully on through the years

IN THE CAB OF THE 1505 JOHN DRANEY HAS SEEN HISTORY MADE IN THE DEVELOPMENT OF THE LOCOMOTIVE

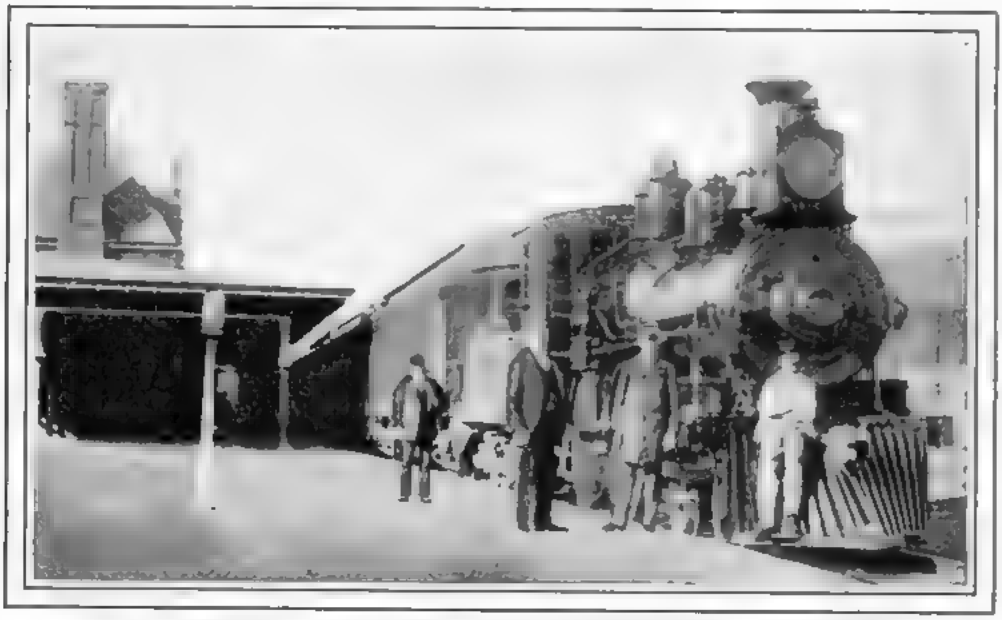
He feels these things himself, but it is very difficult to get him to talk about them. Sitting in Hoboken the other day, in the rooms of the Lackawanna Veterans' Association, of which he has been president for years, he talked about the beginning of his career and the things he has seen—talked not continuously and unbrokenly, but in short, blunt phrases, with many pauses and interruptions. You had to search out a good deal between the lines. The inherent modesty of the man and a certain shyness caused him to flinch from topics which might have seemed to glorify him or to make him conspicuous.

A Good Man in Battle

PERHAPS you would like a picture of him as he sits in a big leather chair in the Veterans' Association. He's slim and wiry and brown as a berry. Forty years as an engineer through sun and wind and rain have weathered his skin almost to the complexion of an Indian. He stands five feet and seven inches,

and weighs about one hundred and fifty pounds. His keen brown eyes study you from under thick brows. A slender, rather long nose projects above tight, competent lips.

As you sit looking at this star engineer, you get the impression that he farming, and finally we Draneys trailed back up North, where we really belonged. I got some schooling in Easton, Pennsylvania, and in Paterson, New Jersey, but I must admit I never got enough to entitle me to be a college professor.



THEY HIGHBALLED THE VARNISHED CARS WITH THESE ENGINES IN THE EIGHTIES

would be a mighty good man to tie to in a fight. It is not always the bulk of a man that counts. It is the driving force within him. In his younger days—in the rough boomer days of railroading, the old roistering, whisky-drinking, hell-raising days—John Draney has licked men twice as big as himself; and yet his voice is low and his speech is hesitant.

"I will be sixty-eight in a few days," he told me, "just four days before Christmas. I was born down in Manassas, Virginia, although my people came from the banks of the Delaware River in New Jersey. They took up some land near the Bull Run battlefield, but they didn't do so well at

"There was a lot of railroading in the Draney blood. As a matter of fact, we Draneys have worked for the D. L. and W. for pretty close to a hundred years. Take old Grandfather Draney. He worked for the old Morris and Essex, in the very beginning of railroading in New Jersey. The Morris and Essex was one of the first links of the present Lackawanna. Then my father came along and spent a good part of his life as section hand and section foreman for the Lackawanna, and then I took a try at it myself. I took it as a starter

"It was on May 1, 1873, when I was only eleven years old, that the road gave me a job as water boy at

Paterson. I reckon I was one of the proudest boys in the whole United States. I felt as if I owned the road, or was going to own it some day. My job was to carry water for the section hands to drink, to keep track of tools and lug them around, and to flag trains. That was fifty-six years ago. Sam Sloan was president of the road in those days. It's hard to believe it was that long ago

"I worked for a while as water boy, and then they recognized my great abilities and elevated me to the important position of track laborer. I helped to repair tracks until 1877, and then they made me fireman on a steam shovel in construction operations. In 1880 I got my first engineering job as engineer of a steam shovel. I could honestly say that next year I will have served fifty years as a locomotive engineer, although I have been running passenger trains for only forty years, mostly fast trains.

"In those days there was a good deal of building going on in the western part of the Lackawanna territory, between Binghamton and Buffalo. One time I was sent up to Bath, New York, to report to a man named Harmer, who was superintendent of construction under General Manager Halstead. Harmer right away introduced me to the alternate steam shovel engineer, a strapping big fellow, very overbearing and surly. When we left the superintendent's office, he grabbed me by the arm and told me he wanted me to have a drink. I told him no, that I did not believe in railroad men taking liquor. There was some talk back and forth, and he said that if I did not take a drink with him he would take me all apart to see what was the matter with me. I did not wait for any more. I hit him on the chin and kicked him where it would do the most good, and the fight was over right then and there.

The Old Boomer Days

"Those old boomer days of fifty years ago were very different from the present. Neither the traveling public nor the railroad men of to-day can picture the customs and conditions that were common at that time. The most dangerous thing we had to contend with, the thing that was the curse of railroading, was the boozing that went on. Most of the men I worked with when I was a youngster were drinking men, and nobody thought much of it. It wasn't a rare thing to see a whole crew, including the engineman, take a train out when they were drunk, or at least had had too much to drink.

"Then, too, there was no regard for safety in those days. Safety work was unknown. The men were unbelievably reckless; and, of course, when they had taken a little too much rye, that recklessness became extra dangerous.

"It used to be the custom back in the eighties, when an engineman or trainman was killed on duty, to drape the engine or the caboose in mourning for a period of thirty days. It became such a regular thing to see these crape-hung cabs and cabooses, even on what were considered the best run railroads, that the companies had to forbid the practice as being bad advertising for the roads.

"In addition to the great number of people who were killed, innumerable cripples were made, and there were few old-timers in those days who did not show marks of their experience. Many of them had hands clipped by the old link and pin couplings, when there were a thousand different kinds of drawbars and dead woods, and no

standard height for them as there is at present. It was a common thing then for a trainman to have his wet glove freeze to a link when making a coupling, or catch in a sliver on the rough link, so as to hold his hand until the drawbars closed on it. Brake wheels, too, would come off the staff for lack of a nut, and would let the brakeman down between the cars. There were many such sources of danger in the crude equipment of the times.

"Those were the days of safety last, because nobody ever thought of safety at all. The methods and practices of the present time stand out in amazing contrast to the looseness and recklessness that we had to put up with when I started railroading. Let me tell you that nobody but an engineman can understand what it meant to the engine crew to find a short flag, or no flag whatever, in a fog, or on a curve, and nothing to stop with but the whistle! With all the tremendous mechanical advances that have been made in railroading, there is no doubt in the world that the safety movement is the greatest development of the past fifty years.

"In 1885 I became roundhouse foreman at Hoboken, and after nursing locomotives for four years, they made me an engineer in 1889. For about a year my runs were in yard service. Then I was taken on in extra passenger service for a year or two, and then they put me on the Boston Flyer, my first big run. I had that from 1893 to 1897.

"The equipment we had thirty-five and forty years ago seems funny when one looks back to it now. When I was running my first trains, we had only wooden cars, both coaches and Pullmans. In those days we lighted the cars with coal oil lamps, and furnished heat with coal stoves, one at each end of a car. This method of lighting and heating sometimes caused frightful tragedies in wrecks that might not otherwise have been so bad. In smash-ups the coal oil lamps and the fires in the stoves were almost certain to set the wooden coaches on fire, and goodness knows how many hundreds and even thousands of people were burned to death in the innumerable wrecks of those days.

Gas Light Era

"A BRAKEMAN used to carry a shovel and a poker as part of his ordinary equipment. It was his job to see that the fires in the stoves were kept going, and that the wicks of the lamps were properly trimmed. Later on, of course, they installed gas lighting, with Pintsch burners. Lots of people can remember those days who are not very elderly themselves.

"Then came another trick of heating the cars. This was a device of two lines of hose running through the train from the locomotive. One line carried the hot steam one way, while the other returned it to the tank in the engine. Still later they devised a scheme by which only one line of hose was run through the train and connected with the boiler in the engine, a governor being used to adjust the heat.

"I don't remember exactly how long ago we began to use electricity for lighting, but I do remember that they used to have the first dynamos in the baggage car, and that the baggage man was the electrician. Nowadays, when one takes a trip, one rides with all the comforts of home, and sometimes with a lot more comforts than you can get at home.

"You can see a lot of the old boys sitting around nowadays, both conduc-

tors and engineers, and you can hear them moaning about the 'good old days.' To me that is all nonsense. The old days were bad days, if you ask me. Everybody in railroading, and everybody who traveled on a train, had to take a chance on life or limb.

"It was funny how seriously the railroads of the seventies and eighties took themselves, and how smart they thought they were. There wasn't a train that had a shower bath, or a barber shop, or a club car, or maids for the ladies, or public stenographers; yet they were advertising their trains as the last word in luxury. The other day I came across some of the old ads in a yellow railroad magazine of the time, and it made me chuckle to see the glowing terms they employed to describe their trains.

"There was a Chicago and Atlantic Railway advertisement which announced that they had smoking cars with a 'buffet where the traveler may lunch at his leisure,' and also Pullmans aglow with Pintsch gas light. The Chicago and Atlantic also informed the traveling public that it was 'not excelled, if equaled, by any other road in the world.' It went on to say that 'the sleeping, drawing-room, and parlor coaches are simply marvels of elegance,' and added that 'the trains are of uniform external appearance. The interior is the perfection of railroading used. They are fitted with every appliance for safety and comfort that the workmen of modern traveling have prompted inventive genius to provide.' Now that is pretty tall talk, but it shows what the railroads in those days thought of themselves.

"Forty years ago the Erie and Chi-

THE OLD "CENTENNIAL." ENGINE NO. 100, A RELIC OF THE EARLY DAYS ON THE LACKAWANNA. BEN DAY WAS THE ENGINEER, EMMET WILLIAMS THE FIREMAN, AND DAVE SANDERS THE SKIPPER

cago line, now the Erie Railroad, offered 'palace hotels on wheels,' and lured the traveling public with the statement that 'there could be had on these trains elegant family rooms, and all the delicacies of the season at popular prices.'

"It is interesting, looking over some of the old records, to see how trains were run in those days. In 1882 the westbound express took thirty-six hours and a half between New York and Chicago, as compared with to-day's twenty hours' journey. And there were only two such expresses daily. One left New York at nine o'clock in the morning and reached Chicago about ten in the evening of the next day. The other left New York at six in the afternoon and reached Chicago at half past six on the morning of the second day.

"Only one train eastward was listed on the time-table of 1882. That train left Chicago at about six in the evening and arrived in New York about half past seven on the morning of the second day. About the same comparison can be made of all the lines and trains of that time with the service and speed of to-day.

Bigger and Better Power

"ENGINES have changed in size and appearance, too. When they began to improve in the building of locomotives, speed was combined with safety. Everybody seemed to want to go safely, and we kept on going safely. In the eighties the best locomotives weighed only about fifty tons. There are thousands now that weigh two hundred or two hundred and fifty tons, and they are ten times more powerful than the old-timers.

"It was a long time before we decided that one engine was strong enough, fast enough, and safe enough to travel from Hoboken to Scranton, the first division on the run to Buffalo. The engines of those days had very squatty stacks and low driving wheels. They never had more than four driving wheels, two on each side. The great iron horses of to-day have six and eight, three and four on each side. I could talk for hours about the changes in the machinery of the locomotive, changes that the engineer and his fireman have to deal with, but these are mostly technical points. Only the old-time engineer can understand how crude and haphazard were the devices and contrivances of forty and fifty years ago.

"And yet the road was good to me. I can honestly say that I never had a real accident. There may have been some good management in this, but I suppose there was a lot of luck. The only serious mishap that ever occurred to one of my trains was in 1901, when I was driving a newspaper train out of Hoboken. A side rod broke and tore the cab to pieces. It was a wonder that both my fireman and myself were not hammered to jelly as that rod went thrashing around; but I have missed misery a thousand times. Most of this was due to fool drivers, both of horses and of automobiles.

"It is the strangest thing to me that people will take such chances with their lives to gain a minute, or even less. Only the other night, when I was driving the Limited near Gene Smith's in the Poconos, and the signal was set against vehicles—the light flashing and the whistle blowing—a reckless fellow came tearing along, determined to beat the train to the crossing. I do not mind saying that what hair I have left stood up, right on end.

In a split second after the rear wheels of the idiot's car cleared the tracks, my cowcatcher went over the spot at sixty miles an hour.

"At Rockaway, New Jersey, not long ago, a little Ford sedan tried this stunt and stalled on the track itself. I slammed on the emergency air and stood every passenger in the Limited on his head, but I stopped the train within twenty feet of the stalled car. I suppose I have gone through that experience a hundred times. It is a wonder that engineers live to be as old as some of us do.

"Yet I would not select any other career if I could begin all over again. President Coolidge once asked me what I would like to do in this world if I had another chance, and I told him that I guess I would stick to my trade. I went over to see Mr. Coolidge at his invitation, and I had the honor to have lunch with the President, Mrs. Coolidge, and Bascom Slemp, the President's secretary. We had just a nice little family party, the four of us and the two White House dogs.

"Mr. Coolidge asked me if there was anything he could do for me, and I said no. I wasn't looking for anything, I said, not even if he would make me ambassador to the Court of St. James."

"I have a better job than you have," I told him.

"Mr. Coolidge chuckled in the way he has, and Mrs. Coolidge, who is one of the most charming ladies I have ever met, laughed right out loud; but Bascom Slemp looked kind of shocked. He must have wondered who let that fellow in. Anyway, he made a record of the chat we had, and showed it to the President afterward. The President said he did not want a word changed in it.

"We talked about a lot of things that day. Mr. Coolidge told me about his early boyhood, and how he used to ride the milk trains, and how he wanted to be an engineer himself. He laughed some, and Mrs. Coolidge told me that I must be pretty funny to make her husband laugh as much as he did.

He Knew Presidents

"I HAVE seen or known — let me see, how many Presidents? Garfield, Arthur, Cleveland, Harrison, McKinley, Roosevelt, Taft, Wilson, Harding, and Coolidge. How many does that make? Ten. That's right. I claim that's pretty much of a record, for I have actually known seven of them. I mean that in the course of the last forty years most of these great men have ridden on my trains, and have shaken hands with me and talked to me at some time or other in their journeys

"The President that I liked best of all was Theodore Roosevelt. He used to ride with me when he was Governor of New York, and later when he was President, and he never failed to stop at my cab and shake hands and chat for a minute or so. He told me about his adventures on a ranch out in Dakota, about the Rough Riders and the Panama Canal and many other things. He was very full of life, and wonderfully democratic, but he had a lot of dignity. Nobody took liberties with Mr. Roosevelt that I ever saw.

"I liked Grover Cleveland mighty well, for he was a strong man. One time when he was traveling with me he told me how they were criticizing him about certain bond issues that he wanted to make.

"'They are bringing every kind of pressure to bear on me,' he said; 'but

I will stand against it, and later on people will praise rather than condemn.'

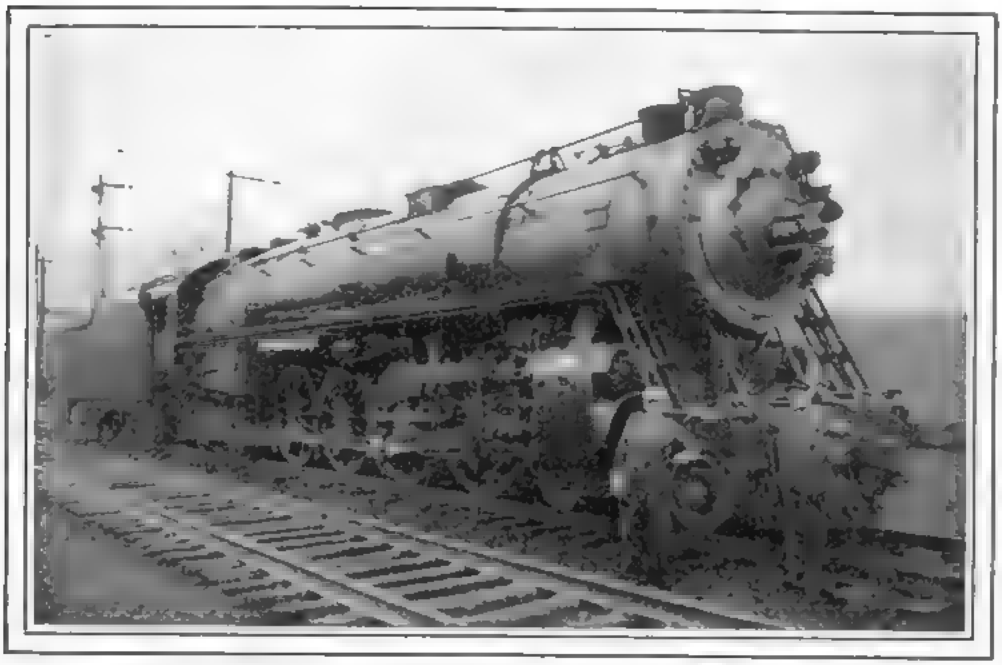
"That showed the kind of man he was, ready to stand like a rock for whatever he thought was right.

"I often met Woodrow Wilson when he was at Princeton, and later when he was Governor of New Jersey and then President. He, too, was a very strong man, but not so friendly in his ways as Mr. Cleveland, Mr. Roosevelt, or Mr. Taft.

"In 1901 I was called upon to run the special train that was taking surgeons, nurses, and special medical supplies from Hoboken to Buffalo, after the crazy man, Czolgosz, shot President McKinley. On board were Dr. Janeway and other leading doctors, who had been asked to make all possible speed to the home of John G. Milburn, in Buffalo, where the President lay with the assassin's bullet in his body. I made a mighty fast run from Hoboken to Buffalo. As far as I know, the time of that run of 395 miles has never been beaten. We used 405 minutes.

"I suppose that most of the prominent Americans of our time have been on my trains. Among them were Governor David Bennett Hill of New York, and Senators Roscoe Conkling and Tom Platt. Senator Platt was president of the United States Express Company, and the Boston Flyer, which I ran from 1893 to 1897, carried United States Express cars. That was how I got to see a good deal of the famous "Easy Boss." I met Dick Croker and some of the other big Tammany men, but I never had much use for politicians at any time

"One of the famous people that I liked best was Mme. Schumann-Heink.



AND NOW, THE BIG JACK ENGINEER DRANEY IS SHOWN AT THE PILOT OF THE 1505—HIS ENGINE—AND AT HIS LEFT IS FIREMAN EDWARD TEICHMAN

She always came up and spoke to me, and thanked me for getting her in safely. Commodore Harold Cunningham of the Leviathan is another fine fellow. He told me once when he rode the engine with me, that all his life he had wanted to be a locomotive engineer, but somehow he had taken to the sea, and there he had stayed. The locomotive was his first love, however.

"I met Admirals Dewey and Schley. Schley traveled on my train to his home at Glen Ridge, New Jersey, when they gave him the big reception in New York after the Spanish-American War. It is very interesting, at my time of life, to sit back in an easy chair and recall all the famous people whom I have actually known and spoken to, and in a sense been friends with."

A Word of Praise

It was on July 22, 1929, that John P. Draney completed his fortieth year of faithful service as an engineer. On that anniversary he received from E. B. Bryant, a Lackawanna official who had known him for more than thirty years, a letter which is among his proudest possessions. Mr. Bryant wrote:

> None but a natural born engineer could have made the record that is yours. When one stops to think that for over thirty years you have been an engineer on fast limited trains on a busy main line, and that a good percentage of your mileage has been made on night runs, in all kinds of weather, fog and snow and rain and sleet, one can realize how extraordinary your record has been. I am one of only a few that are left who know of the good service you have given, and of the close calls you have had from meeting your God; but the day was saved by your natural ability, cool head, and quick acting.
>
> Always when an engineer was wanted for an important special train, and the name of John P. Draney was passed up to the officers, that name was received with a feeling of assurance that everything would be all right with John P. Draney running the engine. You never failed them.
>
> I often think of the morning of November 4, 1899, when you successfully took a crippled engine from Port Morris to Scranton, an engine that the law to-day would not let us run out of the engine house. It was wonderful I think, too, of that Sunday morning in 1901, while you were running at a speed of seventy or more miles an hour with the paper train, when the side rod broke the bottom of the cab from under your feet. It required quick thought on your part.
>
> I also think of that nasty night at Delaware Water Gap, when once more you displayed your wonderful ability as an engineer and protected the sleeping passengers in your care even at the risk of your own life. It is wonderful how one or two seconds of time affects the life of men, as in your case at Port Morris, when, pulling No. 9, you struck the L. and H. engine, and two seconds was the length of time that saved your life.

Engineer Draney has many letters of this character in his possession—letters from President J. M. Davis of the Lackawanna, and from W. G. Van de Water, secretary and treasurer. And he has a little gold medal presented to him by the Lackawanna for which he would not take a fortune. Its inscription reads:

Award of Merit—Safety First—D. L. and W.
Presented to
JOHN P. DRANEY ON MARCH 29, 1915

I asked Engineer Draney how long he expected to keep on driving Lackawanna engines. His reply typifies the man:

"As long as there is any fire under the old boiler."

"I'M GOIN' TO GO BRAKIN' FER THE G. & P." OSCAR SAID

Lure of the Rails

The Extra Board Was Out to Lick Kimpton, But Love and Duty Had Another Card to Play

By E. S. Dellinger

OUT of a coppery sky the burnished September sun beat down upon the Missouri Ozarks. There had had been no rain for weeks, and the cornfields were dry enough to burn. Half withered grass lay clinging to the ground, and ragweeds, brown almost to the middle, stood withering in the corners of the Kimpton hog lot.

Against the gray-barked hickory tree in the center of the lot Oscar Kimpton leaned beside his father, holding in his left hand a can of disinfectant, while he watched a huge-framed Poland-China barrow kick his last. The young man's face was haggard and lined from worry and loss of sleep. His lips and chin sagged and quivered, and his sinewy, bronzed form drooped forward with the listlessness of complete surrender.

Cholera, scourge of the hog raiser, had struck the Kimpton drove, Oscar's own drove, just when he was ready to market, and had completely wiped them out. Even now from over in the southwest corner, where they had sought the scant shade of the rickety rail fence, three sick hogs, the last of the drove, staggered weakly to their feet and reeled toward the concrete wallow in the shade of the hickory tree. The odor of scorched meat was in the air, and smoke curled upward from the log heap where for a week Oscar and his old father had been burning dead porkers—three thousand dollars going up in smoke!

Not much money? Perhaps; but to an Ozark farm boy, three thousand dollars seemed a fortune. To Oscar Kimpton it was more than that. The three thousand dollars was to have made the first payment on the Jones place up in the forks of the creek—the best half section of land on Piney River

Oscar had to have that land, for he could never marry Gladys Hensley without it. That was the dictum of old Cap Hensley, for the old Cap, who raised Kentucky thoroughbreds on his black-and-tan acres and made state fairs for blue ribbons and big money, had no respect for the business sense of old Peter Kimpton, nor any love for the Kimpton son.

Hadn't he begged Kimpton when they came out of the Confederate Army together, to buy bottom land instead of hill and flat? Hadn't Kimpton, stubborn fool that he was, paid out his good money for worthless upland and piddled away his life trying to prove that he had been right? Trying to grow crops and make a farm on land too poor to sprout green eyed peas? Hadn't he sat there year after year and let his sons go away to work for the "damned ole railroad" as soon as they were old enough to handle a brake club or swing a scoop? The Kimpton tribe had become poor white trash—nothing but trash, and out of that trash had come Oscar Kimpton.

Old Cap Hensley had told Oscar all that and more when the boy had come to ask for Gladys

"No daughter of mine," he had concluded, "shall ever tie herself down to poverty on a rock pile or a post oak flat, not while I'm a livin'. The feller that gits my girl's got to have some place fer her to sleep besides a corn shuck bed in a log shanty, an' somethin' to feed her on besides corn bread and sorghum molasses."

Oscar knew that argument was part

reason and part excuse. He knew that old Cap Hensley wanted Percy Curtis in the family because Percy Curtis was heir to two crooked miles of bottom land extending from the Hensley holdings to the mouth of Piney River—bottom land he had been trying to wheedle out of the Curtis family for the last thirty years. He knew also why Percy Curtis took medicine out of bottles whose labels he dared let no one see, but that made no difference.

For four years, now, the battle had been a draw. Gladys refused to marry Percy Curtis. Cap Hensley wouldn't consent for her to marry Oscar Kimpton. Oscar wouldn't marry her against the old man's will. For four years, she had waited while the old man alternately sulked and stormed and raved. During those same years Oscar had worked. He rented the Jones place, grew big crops of corn on it during the summer. During the winter he hauled cordwood, and twelve months a year he pinched the pennies until they begged for mercy.

Until the cholera came he seemed getting ahead, too. Last year he had grown an unusual crop of corn, cribbed it during the winter, bought a hundred head of pigs to fatten for the September market. That would have been a stroke of business genius worthy a Hensley—if the cholera hadn't come. But now—now hogs, corn and money were all gone. He hadn't enough left to buy an old hen and chickens.

The big Poland-China quit kicking, lay still. A curious young gobbler stuck his head through a crack of the fence and said, "Put-put-put." A through freight whistled for the crossing up where the G. & P. tracks enter the Kimpton farm. The crossing whistle was followed by a playful "toot-toot-tut-tut." The old man's gloomy face lighted a bit and Oscar lifted his head to stare across the field at the approaching freight.

A handkerchief was waving from the cab window. He pulled off his cap and waved an answer. That was his oldest brother, Jim—the one who was engineer—wheeling a train of hot shot merchandise toward Alabama.

As the roar and rattle dimmed into faint echoes, Oscar tossed the last of the disinfectant into the concrete wallow and brought his broad shoulders erect.

"Dad!"

The old man turned slowly and faced his son.

"I'm goin' to go brakin' fer the G. & P."

Old Pete Kimpton looked away at the thinning line of smudgy black against the hazy sky and drew a hand across his eyes.

"Goin' tu leave yer ma an' me here by ourselves, air ye, boy?"

"I've got to, dad. Don't you see I have. I'll never git a start here on this ole place—not with luck agin me the way it is. Maybe if I go railroadin' fer a while, I can git a start, git enough money to buy my farm with, then if Gladys waits fer me, I can come back—"

"That's jist the way the others left me, Oscar. Jim an' Frank, an' Fred an' Tom was all goin' to go away an' work a little while. Then they was goin' to come back an' fix up the place fer yer ma an' me. Have they come? Have they, I ast you? Yes! Frank an' Fred's come!"

The thin voice broke. The old man stopped for a moment. A big drop formed in each faded blue eye and traced a crooked path down a weather-beaten cheek. The smoke trail was a thin veil now.

"An' I'm tellin' you, boy, ef you go, you'll be jest like 'em. You'll never come back till you're fetched here in yer coffin same as they was. When a man goes to work fer a railroad, the Devil an' Tom Walker can't make 'im quit till he gits killed er fired."

Oscar drew a cross in the dust with the toe of a dilapidated brogan.

"It won't be that way with me, dad. I ain't hankerin' to work fer the railroad. I'm jist goin' because I have to. These hogs—"

"Yes it will, too," broke in the old man. "This ole railroad's been the curse uh my life fer more'n twenty years. First it ripped a two hundred foot swath right out of the best land I had—completely ruint my farm jist when I was gittin' it shaped up. Then it took my boys away from me, one at a time, jist as they was gittin' growed up an' sent two of 'em back to me all smashed to pieces. Now it's goin' to git you—you—the one I'd sorta figgered might be some help to me an yer ma in our old days."

"Father!"

Oscar reached out a hand to put it on the stooped shoulder. But the old man, unheeding, tottered away, closed the gate of the hog lot with a bang and, hands behind him, went into the log house standing among the pines to tell mother that the hour they had dreaded for years was at last upon them. The hour in which their last son was leaving them, urged as his brothers had been, by the lure of the rail.

That afternoon was for Oscar Kimpton a day of conflict. Time had been when he, too, felt the call, when swaying cars had beckoned and screaming whistles called him. But when, within six months of each other, Frank and Fred had been carried home to rest in the orchard where cinders fell among the flowers upon their graves and thundering trains made the earth vibrate to its very foundations, seeing the grief of his father and mother for their sons, he had resolved that never should they weep for him as they had wept for his older brothers. He would never follow the call of the rail. Now within his mind the conflict was raging. Should he leave them here alone? Should he cast aside the love of his woman, the woman who had waited long for him? Or should he bring her with him to the old home place, drag her down to his level of life, life with its poverty, its strife, its struggle for the means of bare existence.

The battle was not yet ended when he went into the log kitchen to supper. His father sat at the head of the table and in low, even tones, returned thanks for simple food and daily blessings. The last trace of anger was gone from the old voice. In it was only devotion. They ate the meal in silence. Several times his father dashed a hand across the faded blue eyes, and his mother wiped sweat from off her face with the bottom of the calico apron. As he started up from the table she asked haltingly:

"When—when you goin', Oscar?"

"I don't know, mother."

He dropped his eyes to the cracked white plate with the bone-handled knife and fork crossed above it.

"Well, I hate—hate to see you go, son. But—but if you feel like you have to do it, then you go right ahead. We ain't—never done—done right well here, you, pa an' me ain't. Not near so well as ole Cap Hensley with his—his race horse bettin'. But—but it's fer you to decide. The Bible says, you know, 'fer this cause shall a man leave father an' mother an' cleave unto his wife.' You pick your girl. You pick

your work. We ain't got no right to do it fer you. If you want to go, we'll git along somehow—somehow."

"I don't want to go, mother. It ain't that. I want to stay. I've got to go—go or—or give up Gladys. I don't believe I could do that. I never could love nobody else like I love her."

The three sat at the table, the old man drumming on the red cloth with his cracked, gnarled fingers. The big clock, the clock they had bought when they were married, was ticking away. Number Eight whistled for the crossing and went thundering down the hill. The old dog out in the yard howled dismally.

"I've got to go," Oscar finally concluded, "an' the sooner the better. Jim an' Tom can get me a job now while lots of trains are runnin'. I know they can."

"Do you aim to go see Gladys before you leave?" His mother wiped the sweat from her face once more

"Yes, I'm goin' over to-night an' tell 'er—see what she thinks about it."

II

Gladys had heard about the hogs. Late that afternoon her father, a ring of cold triumph in his metallic voice, had told her. She was waiting for Oscar beneath the big walnut tree, and as he closed the gate she slipped silently out upon the walk in front of him. He picked her up in his arms and kissed her. Neither of them spoke until they sat in the porch swing

Finally Oscar blurted out:

"Well, girlie, I come over to tell you I'm goin' away."

"Going away," she gasped, nestling closer to him. "You—you don't mean it!"

"Yes. I *mean* it. I'm goin' to go brakin' fer the G. & P."

She shuddered and moved an inch away from him. He sat toying with the bunch of sweet peas she had pinned upon his coat as they came up the walk. She picked petals off a big red dahlia and dropped them upon the porch.

"What are you going to do with *me*?"

She arched her brows and looked up into his face. Crickets chirruped under the steps. Tree toads croaked and sang down by the pond. A hoot owl called his weird "Who-who, who-who, who-who" from a dead oak tree out on the hillside

"What can I do with you?" he finally countered. "Your dad says we can't marry till I got a bottom farm. Every cent I had in the world jist got done dyin'. It'll take me five years—"

"Listen to me, Oscar Kimpton! Do you realize that I'm over eighteen years old and my own boss? I—"

"I realize you're over eighteen years old, but you're not your own boss. No."

"I am, too. I can marry whomever and whenever I please."

She burst into tears. Oscar slipped an arm about her and drew her head over on his shoulder.

"Sure you can marry whoever you please," he agreed. "But you know and I know that the old man's right. A feller's got no right to marry a woman out of a home like you got and take her to one like I could give you."

"I'm not marrying a home, nor money, nor any old farm," she sobbed. "I—I can marry—you and me—we can make the money. If you go to—to Winfield to work on the railroad—I'm going to go—with you."

"You can't, dear. Why, we starve to death before I could get a regular job and steady work. Besides, I don't aim to spend all my life workin' on a railroad. I aim to be a farmer."

"If you aim to be a farmer, then we'll start together. I'm neither crippled nor paralyzed. I can work same as you can."

"But you don't know what it means, darling. You can't understand. Look at mother. Look at the rest of the poorer farm women around here. Old an' wore out before they're forty. You've never wanted for money. You've always had everything. Now I can go away for a couple or three years, an' if I have luck, I'll come back an' buy me a good farm."

"How do I know you'll come back? Haven't six men gone out of this neighborhood to work for the railroad? Haven't three of them already been brought back home in their coffins mashed up till they wouldn't even let their folks see them? If you go you're just as apt to be the next. Have you thought of that?"

"Yes," he returned slowly and seriously. "Yes, I've thought a heap about it. But it don't scare me none. I've come to the conclusion that a man won't die till his time comes, and when it comes, he'll die jist as quick on a farm wagon as he will on a freight train."

No. 9 whistled for the crossing and went thundering across the bridge, exhaust blaring, lights gleaming in the coaches, smoke climbing skyward and hanging like clouds above her back. Gladys sighed, tossed away her dahlia and sat patting the floor with her right foot.

"Daddy has to have help on the farm, Oscar," she began, changing her tactics. "It's nothing but pure cussedness that keeps him from letting us move down into the house by the river and letting you help him. I wouldn't mind living there a bit. I think it would be lots of fun. We—"

"I wouldn't do it, Gladys. When I come to git you, I aim to be drivin' my own wheelbarrow. I don't aim to be beholden to your daddy for nothing. There ain't nobody goin' to throw it up to me like they do to Bill Jones that my wife's furnishin' me with money an' brains. I'd sooner live in hell!"

"'Pride goeth before destruction,'" quoted Gladys softly, giving his arm a squeeze. "I'm going to have a talk with daddy this very night, and if he says yes, we'll move."

"I'm goin' to Winfield to-morrow."

Early the next morning after he had dragged the last of the dead hogs out to the log heap and was returning, he saw old Cap Hensley come riding up the lane on one of the thoroughbreds. He wondered vaguely why the old gentleman was out so early in the morning. His heart began pounding his ribs. Perhaps Gladys had at last had her way, and the old gentleman was coming to offer him work and a place to live. His face crimsoned. He set his lips firmly together. He couldn't accept such a proposition from old Cap Hensley. The old man reined in his horse at the lot gate.

"Howdy, Oscar," he greeted coldly.

"Howdy, Mr. Hensley," returned the young man.

"My daughter tells me you aim to go away to work fer the railroad to-day."

The old man stroked his goatee with his left hand and flicked his whip at a horsefly with the right.

"Yes, sir. Yes, Mr. Hensley, cholera got all my hogs. The money I aimed to buy the Jones place with this week's all dead now. I've got to go to work on the railroad to get another start."

Old Cap snorted.

"That's jist the way I figgered you'd turn out, young man. You're jist like all the rest uh the breed. You ain't got a particle uh stability, ner business jedgment, ner luck. Even luck's agin yuh ever time yuh turn yer hand over. Not another hog in this country with the cholry exceptin' yours! You ain't got nothin' an' yuh never will have. The Lord never intended fer yuh to have nothin' an' you ain't got gumption enough to git it aginst His will."

THEY WATCHED NO. 9 WHISTLE FOR THE CROSSING AND THUNDER ACROSS THE BRIDGE

Oscar stood with flushed face while Cap Hensley continued his tirade of abuse. The Cap had certainly not changed his mind.

"As a railroad man you'll be jist like the rest of 'em. I never seen one uh them greasy pups yit but what if you ketched 'im by the heels ten days after payday an' turned 'im upside down, not a copper cent could yuh shake out. That's a railroad man fer yuh! Look at them brothers—"

"Stop, Mr. Hensley! You done said enough. You don't know a darned thing about them brothers uh mine or what they've got. Railroadin' ain't what it used to be when you was young. Them days railroad men didn't git enough wages to keep a Chinyman alive. Yuh couldn't expect 'em to have nothin'. They're gettin' decent pay nowadays, an' lots of 'em's layin' up money. Besides, I don't aim to railroad all my—"

"You don't aim to do nothing!" broke in the old man. "An' you don't need to aim atall so fur as my daughter's concerned. I jist got done atellin' her that she's fooled with you long enough. She ain't goin' to marry no railroad man, ner no wuthless member uh this Kimpton tribe. More'n that, I don't want you to be writin' her no fool love letters, ner monkeyin' around her any more. She's goin' to fergit

you an' marry somebody of her own class, er I'll split the hide on her back and salt it down."

The old man touched the horse sharply with the whip and whirling, rode rapidly down the lane. Oscar stood open-mouthed, watching.

"Well of all the old hell-bent sinners—" he muttered. "Shorely that ain't the daddy uh my Gladys."

Angrily he went into the barn and unharnessed the horse. Old Gray whinnied as he started to leave the stable He turned back into the barn, got a nubbin from the crib and with a farewell pat, put it into the open mouth.

His mother met him at the door, a glimmer of hope in her face.

"What—what did Cap Hensley want of you, Oscar?" eagerly.

"Jist—oh, he jist wanted to see me a minute before I left," parried the son.

She pushed her steel-rimmed spectacles back into the graying hair, and stood staring at him. He pulled off the patched, faded jumper and hung it in the wardrobe.

"Didn't he say anything to yuh about goin' down to live on his place an' help with the work?"

"No—no, he didn't say nothin' about it, an' I wouldn't 'a' went if he had. I couldn't."

Thirty minutes later, his clothes changed, his grip packed, he came down to tell his parents good-by. It was a silent, dry-eyed parting. His father chewed solemnly on a wisp of gray beard, gripped the strong hand in his wrinkled one, and murmured:

"Take care uh yourself, son. An' be a good boy."

His mother kissed him on the cheek, smoothed out his hair and straightened the faded cap on his head. He strode away leaving them alone. The two of them still stood in the door when he topped the hill and waved them a final farewell. His only consolation, the quotation his mother had given him the night before: "For this cause—" kept running through his mind.

III

When he arrived in Winfield that afternoon, his brother, the engineer, took him at once to ask the Ozark division trainmaster for a job braking. But the Ozark was not hiring men. Oscar felt blue. Perhaps he'd not be able to get on the road. It would be just his luck

He lay awake that night listening to the groan and grind of street cars, the whir of passing automobiles, the puff and whistle of switch engines in the yards a block away. By daybreak, he was almost glad he had not got

the job. After all, wouldn't it be better to live in poverty on a farm than to work on day after day and night after night among great masses of hard wood and cold steel which every moment seemed trying, actually trying, to catch him off his guard and crush the life out of him. Only that evening while he stood in the train yard watching, he had seen a switchman miss his step and go down beneath the engine to be picked up in pieces by the men with whom he worked. It was horrible. He could still hear the cry with which the man went down, see the blood streaming from his dismembered body as they carried it away. Maybe that was a warning.

If the other divisions whose headquarters were in Winfield should be full handed, he would return to the farm and believe in truth that what is to be will be. There he would at least work with living things, with growing things, with beings which understood him. He thought of the old gray whinnying in the stable—nibbling at the last nubbin he had given.

Morning came at last. The sun, struggling through the smoke clouds of the busy terminal, arose hot and sultry. By seven o'clock, Jim was awake.

"Sleep good last night, kid?" he questioned.

"Nope. Didn't sleep a wink" Slowly.

Jim laughed Jim seemed able to laugh at nothing now. He used to be serious.

"You'll soon get used to it, kid."

"Don't know as I want to get used to it, Jim."

"Come off the dump! Of course you'll git used to it. In a week you'll be sleepin' sound as I do."

"I dunno, Jim. I—I've half a notion to go back home to-day—not even try to git me a job. I ain't goin' to like it, not a bit. Maybe we can manage somehow."

Jim stood before the cracked glass shaving. He whirled with his razor in his hand and faced his brother.

"Aw, bunk! Snap out of it. Of course you're goin' to get a job—not only get it but stay with it. You'll never amount to a tinker's damn if you go back to that ole farm. You got to break loose from dad's galluses some day. This is as good a time as any."

Oscar sat staring gloomily out at the street where already noisy trucks were beginning to move.

Well, you know, Jim, dad needs me down there. He took it mighty hard, my leavin' him like I did."

"Bull an' bullony! Don't go handin' me that line, kid. I know what's the matter with you. Rabbit! Nothin' but rabbit! You got it poked clean up your neck seein' that poor devil get his out there in the yard last night."

Jim finished shaving. Oscar sat on the edge of the bed fooling with his supporters.

"Git your duds on, kid, an' let's go down to breakfast. There ain't no brother uh mine goin' to show up a yaller streak like this. I'm goin' to git you a job."

Down at the Greasy Spoon, with its odor of burned grease and stale coffee, the two brothers ate their hot cakes in silence. Jim appeared to resent Oscar's lack of determination to go railroading and stay. Oscar, on his part, was restrained by a feeling of homesickness. He was too blue to talk.

At eight o'clock sharp they entered the office of the trainmaster of the River Division. The gaunt, grizzled leader of men whirled his swivel chair and acknowledged his introduction to Oscar.

"Kimpton?" He snapped the question sharply. "Brother to this bird here, I reckon."

He nodded at Jim in mock contempt.

"Yes, sir," returned Oscar respectfully.

"How many more brothers you goin' to ask to have put on the various divisions of this G. & P., Kimpton?" questioned the official. "Tryin' to organize a sort of family reunion here. Ain't yuh?"

The old man's steel gray eyes had a glitter in them.

"No. This is the last one. If you can make a brakeman out of it, I won't be botherin' you fellows to hire any more uh my kinfolks till my kid gits old enough to go firin'."

"This River Division will sure as hell make a brakeman out of him if he's got the nerve to stick. We don't fool with 'em here like yuh do over on the Ozark. We make railroad men."

Engineer and trainmaster laughed. Oscar laughed, too. He was tempted to like the big, gruff trainmaster.

"Guess you aim to stay with railroadin', don't you, kid?"

The iron gray man turned and winked at Jim.

"I dunno, Mr. Brown. I aim to stay a couple of years, anyhow."

"Couple of years, me eye! Ever see a man start railroadin' that wanted to stay more'n a couple of years, Jim? Ever see one that quit till he got killed or canned? Here, Miss Ethel," turning to the stenographer, "hand this kid an application blank, an' git 'im by the doctor quick. I want to shoot him out on that noon local to-day with old Pop Summers. Couple uh trips an' we'll know whether he'll stick. So long, Kimpton. Tell my girl down at Ozark hello for me."

Oscar stuck. He had to. Jim's accusation of being yellow had struck home as the old railroader intended it should. Oscar was determined to make good. For thirty days he worked and sweated and rawhided around without pay, learning railroading from men who knew it—bluff, brusque, outspoken men—men who told him in words of one syllable what to do and how to do it, and who, when he did it wrong, blessed him in terms that would make the devil's angels shudder. His friends to a man from the day he landed on their caboose, they spared no pains to either themselves or to him in driving home every personal lesson.

He memorized the rule book from cover to cover. He learned to give and read hand signals and lamp signals, to couple an air hose at one deft snap, to cool and pack a hot box and brass a journal, to chain up a bad order car so it would hold.

On the thirtieth day, Oscar arrived in Winfield about four in the afternoon. Old Pop took him up to the office and turned him in—gave him his O. K.

"Goin' to be any good, Pop?" questioned Brown, nodding toward the student who stood waiting while his letter was read.

"Best dang student I've had out in ten years, Brown," returned the old conductor.

Oscar blushed. That compliment coming from Pop Summers paid royally for all the bawling Pop had given him. It made him glow inside and out.

Oscar bucked the extra board all that winter, worked, that is, when regular men didn't want to. If it rained or snowed, if the circus was in town, if it was pay day week, he worked sixteen hours and rested eight. If the weather was fair, if business was slack, he

would stay in Winfield sometimes three days at a stretch making only eight or ten days a month. During these periods of enforced idleness, he walked the streets and cursed the luck which prevented his making every day.

All this winter he lived in the attic of a cheap rooming house kept by an ugly old hag in the smoke-blackened district close to negro town. He ate like a Chinese coolie, slept in the caboose at Neyberg to save room rent, wore overalls seven days a week and washed them himself. He kept off the streets, away from the pool halls and the picture shows. Men who wanted to be friends with him, he shunned to save money for the farm on Piney River. Saving had become a mania with him. The idea of getting that farm became an obsession with him.

IV

April came. The last snows had melted from the north hillsides. Grass was greening in the narrow valleys. Lilacs bloomed in the farm yards, and oak leaves, in the forests through which the railroad ran, were opening like squirrels' ears. During the mating season, while blue jays and robins and turtle doves were nesting, the feeling of homesickness came upon him. He felt as if he must return to the farm and to Gladys or die.

During all the months while he packed hot boxes and switched freight cars and rode in the sulphurous atmosphere of the locomotive cab, he had heard little of her. His mother seldom mentioned her in the cramped, infrequent letters which he received. He dared not write to her himself lest old Cap Hensley should get the letter and carry out his vicious threat of the preceding summer. He guessed correctly that the old man had refused to permit her to mail letters through the post office, had arranged with the postmistress to block her mail to him.

The only message he had had from her during eight months was a brief note scratched on a postcard and mailed from Mammoth Springs. He kissed this card like a six-year-old kid. He put it in his wallet and carried it next his heart, where it became black and streaked with grease. Then he buried it in his grip along with the bunch of sweet peas she had pinned on his coat the night of his last visit to the Hensley home.

To-night as he lay tossing on his bed in Grandma Judson's attic, he was thinking of her, wondering if she longed for him as he longed for her. His heart was heavy, was filled with a nameless fear. What if Gladys, tiring of the long years of waiting should give in and marry that low down Percy Curtis? Perhaps after all, he had been a fool not to let her come on to Winfield with him.

He gazed up at the dingy ceiling, where in the light of a distant street lamp he could see the cracks with cobwebs hanging from them. No, he could never bring Gladys Hensley to a home like this. Besides, the older extra men, men who had been hired a few days ahead of him in the fall, were howling to have the extra board cut—that is, to have enough men layed off so those who remained could have regular work. A cut of five men would include him, would leave him out of a job for weeks, perhaps for months. Certainly, he could not bring Gladys Hensley to share a life like this.

Out of the bedlam of night yard sounds, came a song. He listened. The singers were coming nearer. He distinguished their voices, four of them, four extra brakemen, pals of his, who

had been killing time at a picture show, or perchance up to the yard office to learn when they might work again. On their way home, they were singing the extra brakeman's song—singing in plaintive tones to the tune of "O Happy Day":

"Nobody knows how lean I am;
Nobody seems to give a dang,
But on this extra board I'll stay,
Till I dry up and blow away."

The fellows passed down the street. Their song, dimmed by distance, blended with the clang of hammer, the snort of exhaust, the din of whistle and bell.

Oscar was homesick, maybe lovesick. Admitting that fact he slept—slept and dreamed of Gladys Hensley, dreamed that from the dismal doorway of his attic bedroom, she stared at him, lean and hollow-eyed, that tattered shreds of calico hung upon her, and that with an accusing finger pointing at him she was singing the dismal dirge:

"Nobody knows how lean I am;
Nobody seems to give a dang—

He was brought from dream to reality by a thumping and pounding on his door.

"Who's there?" he challenged, starting up in bed.

"Me—Pat—the call boy. Hurry up an' open this door."

A crash of thunder jarred the old house. A tongue of lightning licked across the patch of sky visible through his window. Water was streaming off the kid's yellow slicker and forming in puddles about his rubber boots.

"You're called fer a drag east at one five," he informed. "Git the seven spot."

He stuck out the call book for Oscar to sign.

"Ain't you made a mistake, Pat?" asked Oscar, peering through the dim light of the dingy lantern. "I was four times out at supper."

"Nope. I ain't made no mistake It's rainin' pitchforks p'ints down, an' nigger babies feet first. Kinney an' O'Brien both played sick. I'm goin' to turn them two birds in in the mornin' an' find out whether they was sick. Leary's got a sick kid, an' you're next. Hurry up an' git your John Henry down here. I ain't got all night to wait. I been a half hour gittin' a head shack. I got to call the hind shack an' the captain yet. So long. Meet yuh in wet hell some other night. Don't go back to bed now."

The kid breezed away. Oscar crawled into his overalls and oilskins, crammed a dry suit in his grip and went up to the restaurant for lunch.

The rain was a steady downpour. The wind slapped streaks of it against the globe of his lantern. Each street he crossed was full of water. No wonder O'Brien and Kinney had turned down a trip on a night like this. Still he was glad they had, for every trip meant ten to twelve dollars which he could add to his now diminishing balance in the Citizen's State Bank.

With his head down so the water would run off his hat, he walked into the Greasy Spoon, flopped down at the counter and set his lantern between his feet. Skirts swished. The white aproned waitress stopped before him waiting for his order. He didn't think much of this dame. Ugly crum that she was, she had tried to flirt with him. He started to give his order without looking up.

"Bring me a coupl'a eggs—"

His eyes strayed over the middle of that white apron. It was clean. That gave him a shock. He hadn't seen a

clean apron on the night girl in the Greasy Spoon during the whole eight months he had been eating there. He pushed back his hat, let his eyes follow that apron to its top. He knocked his hat off on the floor. The waitress started, too. The face at the top of that apron was a new face, new, yet familiar. He sprang to his feet, upsetting his lantern, and reached both hands across the counter.

"Why—why—Gladys!" he stuttered.

She laid her right hand in his. He put his left one on top of it, stood holding it for a long time; too long.

"What—what you doin' h e r e, Gladys?"

He stroked the hand he held, stroked it and squeezed it.

"I can't tell you, boy—oh, not here."

She tugged at the hand he held, but he gripped it closer.

The door burst open and an incoming train crew, tired and wet even through their oilskin suits, trooped in. Oscar was still in a daze. He couldn't turn loose that hand, not yet.

"Hey, sister!" yelled the disgruntled fireman before he could get to a table. "Gimme a double order uh ham an'."

"Don't yuh do it, sweetie," coaxed the old hoghead. "I'm first out on this board."

"Naw, don't pay no 'tention to them birds, darlin'. Cut off behind that tank uh javvy an' kick it down this way. I'm froze stiff." That was the boomer from Tucson.

"Turn loose uh that new dame, Whitey," bawled the fat conductor. "You all can play hands to-morrow. We're huntin' service."

That's the way the gang initiated every night girl at the Greasy Spoon. They meant no harm by their razzing Besides, they had found her playing hands across the counter with the most bashful rube shack on the job. That was the signal for a clear track and a fast train—to them. Oscar had heard the line before, had merely ducked his head and gone on about his business. Now he dropped the hand he held, clenched both fists, and eyes blazing, whirled to face them.

"Shut your dirty mouths!" he screamed. "Shut 'em an' keep 'em shut!"

The five men stopped where they were, stopped and stared at Oscar and Gladys. The boomer's face took on an ugly sneer. He took a step toward them. Oscar advanced to meet him.

Big Swede Larson, the old hoghead who had called her sweetie, was the first to come alive to the fact that they had misread their signals and start backing up.

"Why—why, beg your pardon, miss," he apologized, stepping between the boomer and Oscar. "Beg your pardon."

Gladys came from behind the counter, and her face white with fear, stood with a hand laid lightly on Oscar's sleeve. The boomer stopped. The conductor came from around the table and stood facing them.

"Don't get sore about it, Kimpton. Be a sport. No insult intended."

He held out his hand. Oscar looked at it for a moment, then red surging into his face where white had been, he took the hand and having shaken, turned with a sheepish grin and dropped into his seat. Gladys went in with the orders and within five minutes, the matter apparently forgotten, the members of the train crew were seriously discussing train orders and washouts and drowned block signals.

The next thirty-six hours was a

period of intense anxiety to Oscar Kimpton. He had to leave Winfield without an opportunity to speak to Gladys alone to learn why she had left home and come to Winfield to a job in a restaurant. He thought of her constantly. He was thinking of her when he missed grab iron on the tender of the seven spot that night and a rear wheel crushed the heel of his left shoe to a pulp He was thinking of her as his train dragged along through the flooded bottoms where the side rods on the engine slapped into the water like a set of oars. He was still guessing when he returned to Winfield, hurried into a clean pair of overalls and hunted her up at the Greasy Spoon.

OSCAR CLENCHED BOTH FISTS AND WHIRLED ON THEM

"What's happened down home Gladys?" he questioned eagerly the minute they were alone.

"Plenty!" she snapped, her eyes kindling. "My dad tried all winter to make me marry Percy Curtis. I told him I'd see him in Halifax first. He swore he'd kick me out of the house unless I did. I told him to kick. Then I wrote you a letter—"

"I never got it."

"Sure you never got it. That red-headed hyena up at the post office slipped it out of the mail and gave it to dad. He came home, locked me up in the attic and kept me there four days without anything to eat—except what Mary sneaked to me while he was gone. Mary let me out Friday, and I didn't know what to do but—but—" her voice quavered.

Oscar put his arms about her, drew her to him. She steadied herself and continued.

"One of the girls I used to know when I was in school at Fairview, brought me over here and got me a job in this dirty hole. I'm—I'm not stuck on the job."

She shuddered.

"You're not going to work here any longer, either," interrupted Oscar. "It's not a fit place for a girl to be."

"How are you goin' to help yourself, smarty?" She drew away from him and looked up saucily. "You wouldn't bring me here when I wanted to come with you. Now I got away myself, I sure don't aim to go back to dad."

"You don't have to go back to dad." He got an arm about her again. "I've got five hundred dollars down in the bank."

"Well," softly, "that's not my money."

"It's ours, Gladys, yours and mine. I made it for us. It ain't much, but—But lots of folks has started in on less."

"Yes?" archly.

"Will you — will you — try it? Gladys?"

For thirty minutes there was no sound in the barren room but the breathing of the pair and an occasional sound like the lapping of a tiny wave against a rock.

"What about—about the farm you were saving that money for, dearie?" finally.

"The farm! Oh, darn the farm! I want you."

"But you wouldn't bring me with you when you came," pouting.

"I've been doin' some thinkin', honey."

"You mean you don't want the farm any more? Mean you aim to railroad the rest of your days?"

"Sure I want the farm," quickly. "But I—I think I can get it, too. Other folks has bought farms with the money they made railroadin'. Why, nearly every man on this job's just stayin' with it till he can lay up enough money to buy a farm. Then he's goin' to quit."

Gladys nodded her head slowly.

"You've changed some since you left home, Oscar."

"Yes, some, maybe. Why?"

"Because, when you left home, you wouldn't even think of doing anything besides farm. Now I don't believe you'd do anything but—"

"But make a living for you, Gladys," Oscar broke in. "I—I've been dreadfully unhappy for the last year. I'd scoop coal for Satan to keep you with me, dear. That's it—I want you."

And he got her. They were already married when old Cap Hensley found them a couple of days later, moved into a little three-room cottage a block from the yard office. The old man frothed at the mouth. He ran his fingers over his head where his hair used to be, stroked his unkempt goatee, stamped the floor and raved. He called down upon them the damnation of the gods above, called up the torture of the devils below. Never did heathen priest pronounce curse more solemnly, more

awfully. Oscar and Gladys were oppressed by the awfulness of the calamities which he in his insane frenzy was calling upon them.

V

Nor did that feeling of oppression leave them as the days grew into months and the months dragged into years. On each of their two trips to Winston before the baby came, they went together up the grass grown walk, passed between the two marble lions which guarded the entrance to the Hensley home, and sought to make their peace with the father who had cursed them. But, though the old dog greeted them with a wag and a kiss, and though Tennessee Mary fell on Gladys's neck and wept, old Cap kept himself out of sight, gave orders for them to go away and stay. On their return from the last of these trips, the gloomy foreboding which had been filtering into their beings like insidious poison, now thrust itself more deeply into their lives.

Especially was this true of Gladys. Constant worry about the estrangement and brooding over her father's frenzied cursings, resurrected that old religious superstition instilled into her by Tennessee Mary throughout her years of childhood, brought it forth in all its gripping power. And alongside this superstitious fear, arose a reasoned fear which had its origin in the knowledge of the natural hazards of her husband's occupation.

Tortured by these two, she reached a point where, when he was working, she would pitch and toss, listening always for the tinkle of the telephone. The telephone, her neighbors told her, had rung at Brakeman Watson's the night when he, switching in the rain, had missed his step and gone down beneath the wheels to be ground to pieces. So also had it rung at Engineer Odell's, when the Texas Mail turned over with him on the Hill, and his flesh and bone were picked up in a scoop, cooked like so much beef in a kettle.

While she was tortured thus by fears and superstitions, her lips grew bloodless; her hair thinned about her temples. Her face became thin and pinched as her strength flowed out in needless worry. Money came in slowly. They got into debt while he was bucking the extra board; and debts were hard to pay. Then when the baby came in the second May after they were married, Gladys did not do well. When baby was a month old, she was still as helpless as a little child. The doctor shook his head every time he saw her. He called a specialist from Kansas City.

"Operation," said the specialist laconically. "Poison pouring into her system. Never walk till she's operated on, maybe not then. Be crazy in a month unless you get her attended to."

Oscar heard the verdict and was dumb. Every word was like a clod falling upon a casket in the grave. Operations cost money. He had none. He asked for a loan at the bank, was flatly refused. All that night he paced the floor of his lonely home. Only one man he knew could raise the money for him. That man was old Cap Hensley. Could he face old Cap Hensley after all that had passed? Face him and ask for money? Could he? Unless he did, Gladys must surely die! In her death would old Cap Hensley's bitterest curse be fulfilled?

Old Cap Hensley's curse! That was it. That was the cause. Worrying over those curses, had put Gladys where she was. Cap Hensley was to blame. Cap Hensley must pay.

At noon the next day, Oscar trudged for the second time within a year up the neglected walk. This time he went alone. The lions stared senselessly at him. Pigeons fluttered in droves about the ridgepoles, and flew away to the barn. The old dog growled ominously. Neglected rosebushes which Gladys had planted by the steps, grabbed at his threadbare trousers. He crossed the porch, lifted the knocker, peered through the oval glass in the hall door, saw old Cap Hensley in the dining room eating his lonely meal.

Arising, the old man strode down the hallway. Half way to the door, he stopped, shook a fist at the face formed in the oval glass, and whirling back dropped into his chair. Soon the old housekeeper, Tennessee Mary, opened a crack in the door.

"Cap said tell you you needn't come in, Oscar."

"I'm comin' in, Mary. I've come to see Cap Hensley."

He thrust a hand inside the door, shoved it open and strode toward the dining room. Old Cap saw him coming. He arose, stood trembling, face like chalk, holding to the back of his chair

"Git! Git out of here, Oscar Kimpton!" he commanded hoarsely. "I told you never to darken my door agin. Git out uh here an' stay out!"

Oscar came close. He was within two feet of the old man before he spoke.

"It's Gladys, Mr. Hensley. Listen to me. Gladys is sick, an'—"

"I said go, hang your ornery breed! Go! What do I care if Gladys is sick? What's she to me? She left my house an' married you—you—scum! Trash! Go!"

"But she's sick, Mr. Hensley. Don't you understand? She'll die unless—"

"Let 'er die!" raved the old man. "*You* go! An' if you ever darken my door again, I'll meet you here with the shotgun, loaded both barrels with buckshot."

Slowly, white to the roots of his hair, Oscar backed through the hall, the housekeeper held open the door, closed it behind him. Inside Cap Hensley dropped to the table, his head fell into his arms, and he broke into frantic sobbing. On the neglected walk, Oscar stumbled to the gate, the old dog, following at his heels and growling ominously.

Straight over to his father's he went from there, crossed the river with its clear water rippling in the sunlight, climbed the hill and started up the walk bordered with well kept flowers. His mother met him half way down to the gate. Her face was full of eagerness.

"Where's Gladys an'—an' the baby?" she questioned before she reached him.

Then coming closer she saw his face, white, drawn, haggard

"Why—why, what's the matter, child?" anxiously. "Is—Gladys—"

Oscar wept. His mother put a wrinkled arm about his waist and led him up on the old porch, talked to him like he was a baby. When he gained control of himself, he answered her half-asked question.

"No, mother, Gladys is not dead. But—but she's sick. Awful sick. She's in the hospital. She's got to be operated on or else she's goin' to die."

His mother patted the big hand.

"I—I ain't got the money to have it done," simply.

"Why don't you go to Cap—"

He gave a despairing gesture. She stopped, staring incredulously.

"You don't — don't mean he wouldn't—let you—have it?"

Oscar nodded. A cat rubbed against his legs, purred softly. The wind blew rose petals from the mass of bushes at their feet, whipped rose scent into their nostrils.

"How much money do you need, Oscar?" after a long pause.

"Five hundred at the least. Maybe more before it's over with."

"You can't get it from Jim or from the bank?"

"Jim's not got it. The bank won't let me have it, not another cent. I had to mortgage my furniture to pay her bill when the baby come. I—I don't know what I'll do."

He dashed a blue shirt sleeve across his eyes, and went away to the barn. His mother rang the dinner bell on its oaken post, rang until she knew Father Kimpton, plowing in the field had heard.

When his father came in from the field, the three of them sat talking over the situation. Mrs. Kimpton was bitter in her criticism of old Cap Hensley. Mr. Kimpton had no word of censure. Oscar said little. He had come home for sympathy, but his mother was willing to give more.

"Do you reckon, pa, Mr. Little would let you have that much money?" she questioned.

Mr. Little was president of the Citizen's State Bank of Winston.

"I dunno, ma," dubiously. "The most I ever tried to borry frum him at wunst was fifty dollars. He might. I allus paid him up prompt."

Oscar brightened. He had not thought of getting money through his father. His father was a poor man.

"Reckon we could, dad?" eagerly. "I could pay the note in a couple of years now that I've got a regular job."

"We might try it, son. We can't jest let Gladys lay there an' die."

When the three of them went together to see Mr. Little in his office, the latter sat for a long time considering the question.

"How much are you making now, Oscar?" he asked.

"I've averaged a hundred ten a month for the two years and more I've been on; but I've got a regular job now. I ought to make better than a hundred fifty."

"Hundred fifty a month? How much of that can you pay on this note?"

Oscar did some rapid calculating.

"I think I can pay twenty-five a month and pay my other debts, Mr. Little. Yes, I'll say twenty-five a month."

The banker made a row of figures on a blotter.

"Tell you what I'll do, Mr. Kimpton. You give a mortgage on the place out there for five hundred, an' I'll let you have the money. Oscar can pay it back twenty-five a month. He ought to make it in two years easy. Two years, say, on the mortgage."

Old Pete Kimpton chewed solemnly on a wisp of gray beard he had sucked into his mouth. Oscar and his mother both looked at him anxiously.

"I hate to ask for a mortgage, Mr. Kimpton," spoke the banker. "But you see my position. I've got to protect my funds."

"I'll pay it all back, dad," urged Oscar. "Every cent of it. It won't cost you a cent. An' it'll save her life."

"I hate mortgages, son. I hate mortgages. They've took more farms than one in this country an' left their owners out of a home. But—but I guess there ain't no other way—no other way."

He laid his head in his cracked, gnarled hands and sobbed. Mother patted him on the shoulder encouragingly.

"Don't take it so hard, pa. Oscar'll pay it all back."

"Yes. Oscar'll pay it onless somethin' happens to 'im. But that blamed ole railroad, ma. Yuh know it's done took two o' my boys."

VI

WITHIN a month after the borrowing of the money, Gladys came home with the baby; and they began the long drag out from under their burden of debt.

Oscar did not tell her he had tried to borrow from her father. She never knew of his trip there until nearly two years later.

Month after month they scrimped and saved, paying regularly on their debts in Winfield and on the mortgage at the Winston Bank. For nearly a year he never missed a payment. The outlook seemed brighter for them. With baby for company, she grew stronger day by day; and her strength was reflected to him in a happier exterior. They even laughed together now about her earlier fears of her father's curses. Of course they agreed, those fears had been grounded on pure superstition. Neither curse nor blessing could change life one iota, except as it reflected itself in the attitude of its objects. But before the year rolled around, they had reason to reconsider their decision.

Oscar was called for a drag east. It had been raining for a week. The ground was full of water. The river covered miles of track on his division, and still it rained. As time drew near for his departure, he stood in the kitchen polishing his lantern with a handful of executed train orders.

"I hate for you to go out to-night, dearie," Gladys said anxiously as she set his filled lunch pail on the corner of the table. "I just feel like something was going to happen."

Oscar lighted his lantern, adjusted the flame and set it beside the crib.

"Nerves, sweetheart. Nothin' but nerves." He knotted the bandanna about his neck, and coming to her gathered her in his arms. "This pesky rain's gettin' on your nerves—gettin' you all worked up. Forget it."

He gave her another squeeze and put on his dirty oilskin suit. She stood watching him. Laid a trembling hand on the crib.

"Yes, it's the rain—the rain and the water." She shuddered. "It makes cold chills creep up my spine to think of your flagging through those dreary bottoms."

"We don't have to flag, dearie. The section men walk that track every hour and we go through on slow order."

"But the trainmen are walking it now. Mr. Lawson got in from Neyberg about dark. He's tired to death. Mrs. Lawson said he walked ten miles of track that was under water—walked it to see if the track was still there."

"Bullony!" Oscar wondered why railroad men would tell their wives gloomy tales like that even if true.

"Why don't you lay off till this rain quits?" urged Gladys.

"I can't lay off, dear. I need the money. Besides, they wouldn't let me lay off. Even if I could, somebody has to do that work. That's what us fellows get paid for, an' we have to take the good with the bad. As long as I 'hold a job brakin' on this G. & P., I aim to do my share."

He kissed the baby, picked up lantern, grip and lunch pail in his left hand, and started for the door. She placed herself in front of him; and, a smile on her trembling lips, a tear

glistening in each eye lifted her face for him to kiss.

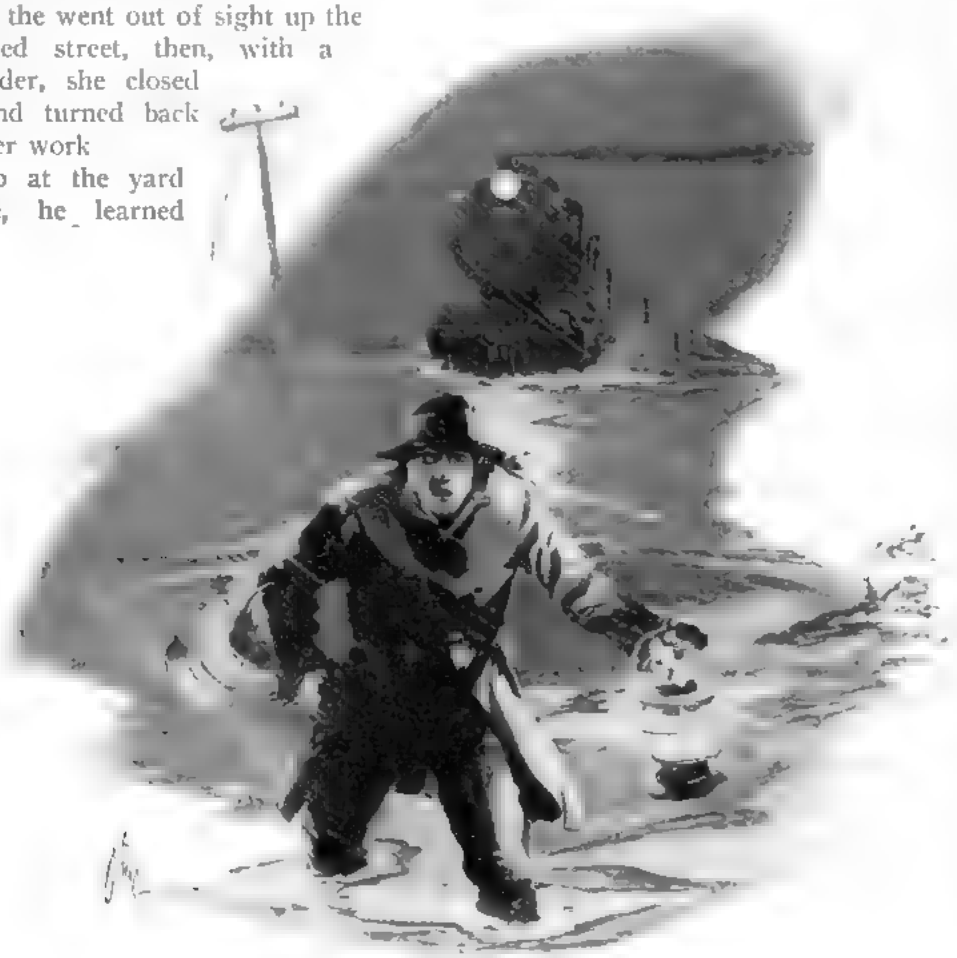
"Don't worry, kiddo," he admonished

"Do be careful, dear."

She stood holding the door open until the went out of sight up the flooded street, then, with a shudder, she closed it and turned back to her work

Up at the yard office, he learned from the cross-ruled blackboard that he was getting sixty cars of dead freight, that his train was made up on track three, that his engine was No. 11 and that old Swede Larson was his hog-head.

His lips cracked in a grin as he remembered another rainy night when he had met Swede Larson—the night when the old engineer had called Gladys "sweetie." Larson had often kidded him and Gladys about that night. He was still thinking about it when he went trudging through the rain, swung up the steps of Engine No. 11, and set his grip and lunch beside the boiler head.



THE WATER CAME UP TO HIS KNEES

"Crazy trip we got ahead of us to-night, sweetie," growled the big Swede. "Whaddo they think we are? Sailors or railroad men? Huh? Why'n the heck don't they leave this dead stuff in the yards till a man can git a train

over the division without the hogs gittin' 'im?"

"She's got to move, Larson. Rain or no rain. Sure goin' to be a nasty night, though."

"You're right she's goin' to be nasty They say every block between Enloe and Burlington's out uh commission. Everybody's flaggin' through—An' listen, boy, the section men's all swingin' sand bags so they're lettin' the head shack flag them blocks."

"Yeah?" Oscar recrossed the cab and stood looking out of the gangway at the switch lights twinkling through the rain.

"Danged glad somebody besides me's decoratin' the head end uh this drag to-night, pardner," spoke up the fireman. "You brainless deadheads is goin' keep walkin' that drowned track in Red River bottoms till yuh all walk out to a place where the track ain't. Why'n the heck don't they raise that track? I'd like to know. It's been under water every summer sence I been on this lousy job."

He tossed his cigarette stub into the gangway, turned on his stoker and opened his injector. Oscar lined the switches out to the train and coupled on.

Twenty minutes later they slipped and crashed out over the switch. Green and red and yellow lights buried themselves in falling water; street lights blinked out behind them, and they clanked along over miles of sodden track.

The night wore through, still it rained, a steady even downpour. Regular trains were off schedule. Their drag found almost every passing track to meet a passenger or a through freight or to let one by. Every time they stopped, Oscar and his partner walked the train until they met, feeling for hot journal boxes, inspecting draft gear and brake rigging. At ten thirty he found a car of wheat with a pair of hot wheels—brakes not releasing. He cut out the brake. About midnight his partner found a broken arch bar on a car of cement—found it in time to set out the car and prevent a fifty thousand dollar wreck. At Hinton at one o'clock, he came across a brake beam dragging. Thirty cars back to the engine through the rain for a wrench and hammer.

"You fellers sure are earnin' your two bits this trip, brakie," commented Larson when Oscar returned the wrench.

"Always do when it rains. First thing old Pop Summers told me here was, 'when it rains, look out fer trouble.' He guessed straight."

At Hinton they entered the Red River bottoms. Muddy water backed up almost even with the ties on both sides of the track, block signal after block signal, blobs of trembling green rose out of the rain, crept toward them and slipped behind. Oscar calling across the cab his "clear board" and getting the engineer's echoed answer. But three miles out of Enloe, the light was yellow.

"Forty-five!" called Oscar.

"Forty-five," checked back the engineer. "Somebody down there or else the river's put out another block. This one was O. K. at midnight."

The big Swede cut off steam and went drifting down past the caution signal. Oscar cleaned the globe of the red lantern, shook it and listened to the splashing of the oil, straightened the wire bale, took some torpedoes and some fusees from the seat box, and stood behind the engineer. Ahead of them where a green light or a red one should be, was nothing but darkness—

darkness tunneled through in an ever widening cone by the glare of their headlight with the rain streaking through.

"Here's where yuh start walkin', sweetie!" soothed the old hoghead. "The light's out on this block down here, an' I'll bet four bits she's red."

"Yeah, here's where you start walkin'," put in the fireman. "Sure does a feller good to see the head shack doin' a little honest to gosh work on the job."

The train came to a stop beside the first drowned block. The whistle rang out its "to-o-o-t-toot-toot-toot" signal to the rear man to flag behind.

Oscar dropped off and went trudging along the track, splashing water at every step. When he was a half mile beyond the block, he heard the whistle calling in his partner from the rear. The whistle sounded faint and far off. "Splash—splash—splash" he slopped through the muddy water. Only the glistening tops of the rails shone above the surface. Except for these and the telegraph poles which rose like black skeletons out of the shadows, nothing was visible but a lonely ocean, surface broken by the spatter of raindrops.

Soon the rails disappeared as he entered deeper water—water which came now to his knees. He swung a lantern on each elbow to keep them out of the water. His progress was slow. Soon the headlight was shining three hundred feet behind him. At this distance it followed like a stalking shadow. He recalled the warning Gladys had given him, recalled once more those evil curses of her father.

"Bunk!" he tried to assure himself, "pure bunk!"

Telegraph poles floated slowly by him, water lapping at their feet. On every fifth one was a number. He noted these numbers carefully. They were to him both chart and compass.

"Gittin' close to that first culvert," he muttered, reading aloud a number. "Feller was to go through one uh them danged things, it'd sure's the devil skin a shin for him."

He slowed his gait, feeling cautiously for the wooden ties. The water struck him half way up the thighs.

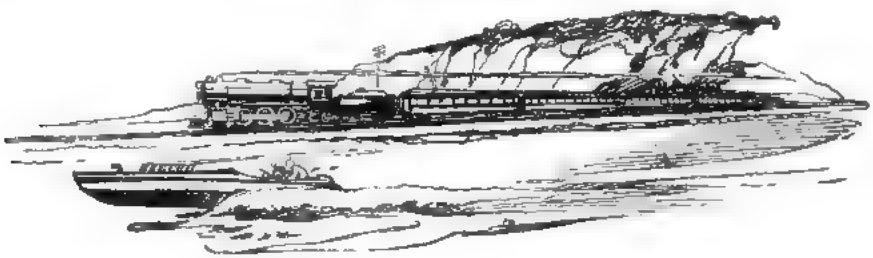
"Damn a job uh railroadin'."

A white post, barely showing above the water's surface, drifted toward him, rising and falling as if actually loose. That post marked the beginning of a low trestle a hundred feet long.

"Wish I was back on the farm. Nobody but a damned fool would hold onto a job like this."

The post was now on his right. He could not read the inscription it bore. The numbers were buried beneath the water. He felt his way cautiously, slipping one foot along just inside the rail until he felt a tie, then bringing the other forward. Between each two ties was a space eight inches wide and eight feet long with nothing but muddy water below.

To Be Concluded



Moxley Puts One Over

It Took a Paint-Scorching Meet to Take a Joker's Whim Out of a Dare-Devil Hogger

By Robert Fulkerson Hoffman

SEVEN thousand feet up in the clear mountain air, with the early morning sun gilding near-by cliffs and dispelling the purple shadows of distant mesas, Lem Moxley, engineer, tinkered leisurely about the motion-parts of his engine. On the engine-deck just above him, Dan Gaunt, his wiry young fireman, bustled about in sure-handed fashion putting the last skillful touches upon an already white-hot fire.

Fast coupled behind the tender of their engine 694 a long drag of mixed freight stretched away down the yards, past the outwardly silent despatcher's office at Rock Rampart, to its end at the dingy upthrust of Conductor Tanner's distant caboose whose smudgy, yellow cupola showed saucily as the buttons of a rattlesnake on guard above a gnarled mesquite root.

On the train sheet in the despatcher's office, "No. 24" was this drag's commonplace designation. No "Chieftain," no "Red Arrow," no "Missionary," no swift-running "Greyhound" about this sullen-looking, hard-bitten drag which veteran "Dad" Cockerill and his dead game fireman had yanked across the desert in the fighting, lonely watches of the night and landed safely but late in Rock Rampart yards.

Except for this dust-coated No. 24 and a helper engine at front and rear moving across the ladder tracks to couple on, the yards were empty. And so, the great silence of the upper air had settled for a little while like a world-old benediction upon that sun-bathed little mountain town. The hum of the busy division-point shops and roundhouse had become no more than a crooning lullaby for the hurrying overlands and the battling freights which had gone roaring and shouting forth to be gathered for a time into the waiting arms of the everlasting mountains.

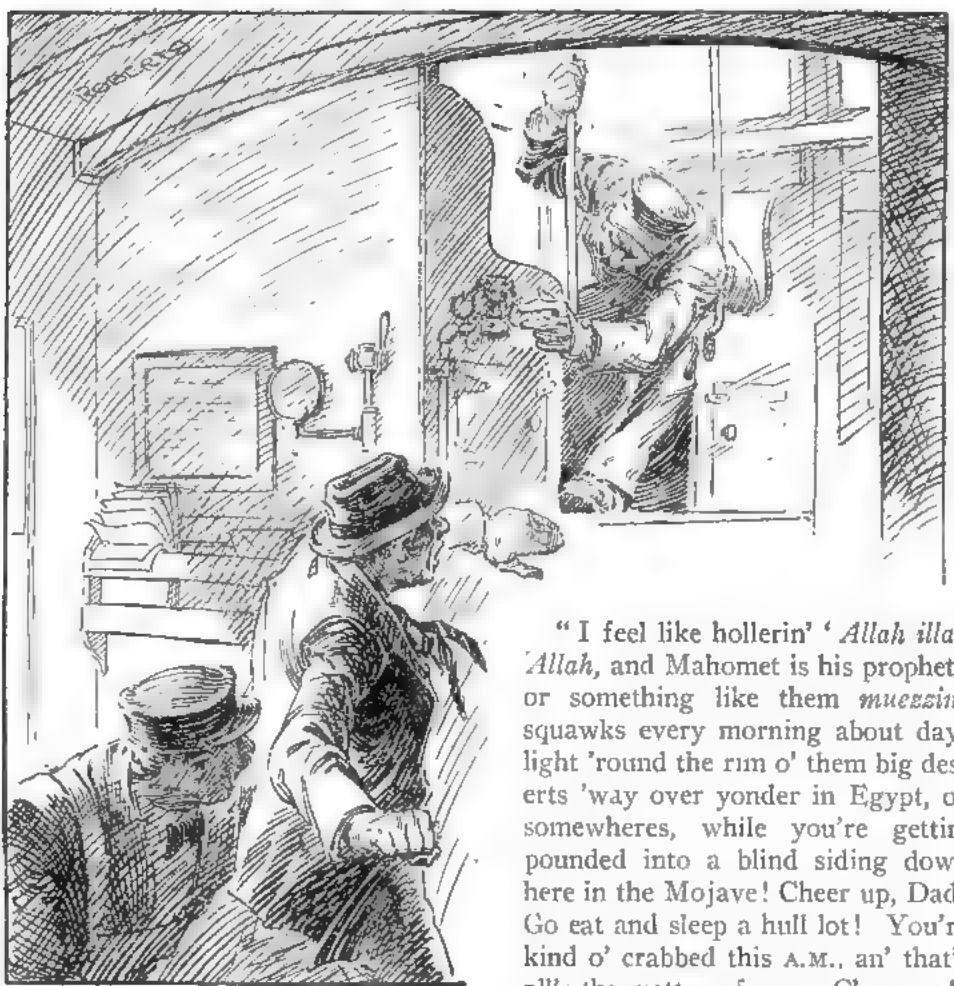
Upon that unwonted scene of peace the little door of the roundhouse just across the tracks from engine 694 swung open and Dad Cockerill emerged from those smoky inner depths of mystery and shadowy engines. Close after him trailed his tired but unbeaten fireman, and the weary two of them came stumbling across the rails toward Moxley and his engine.

"Hello, Dad!" Moxley hailed them cheerily. "Howdy, you an' that brave blackface fireboy of yours? Have you sent up your morning orison this great

an' glorious day? Hold up your head, man; hold your feet up an' quit stumbling. You'll sure cast a shoe or break a leg next!"

"Orison nothin'," growled Cockerill as they came to a halt beside the engine. "What you been drinkin' besides boardin' house coffee? We're half cracked for sleep an' breakfast, but I reckon if a fellow got stabbed an' hung up for a week in that sand-spittin' desert down yonder an' you come whoopin' by, you'd call for cheers about them glorious sunrises an' things, an' expect to git 'em, too, wouldn't you?"

"Me?" laughed Moxley as he turned his ruddy face fully toward the flooding sunlight. "Me?" as he squared his broad shoulders and set his double row of big, white teeth gleaming. "I'm full of sleep and breakfast! Call boy never touched me, Dad, while they cleared this hull yard of a jam o' freight an' let me sleep till it come time to hook onto this blessed drag o' yours.



HE DREW HIS HEAD IN WITH AN ANGRY JERK AND WAS REACHING FOR THE AIR VALVE TO SET THE BRAKES FROM THE REAR

"I feel like hollerin' '*Allah illah Allah,* and Mahomet is his prophet,' or something like them *muezzins* squawks every morning about daylight 'round the rim o' them big deserts 'way over yonder in Egypt, or somewheres, while you're gettin' pounded into a blind siding down here in the Mojave! Cheer up, Dad! Go eat and sleep a hull lot! You're kind o' crabbed this A.M., an' that's all's the matter of you. Cheer up!"

"Yeh!" said Cockerill, while Dan Gaunt at the gangway above and

Cockerill's fireman below chuckled a gritty duet. Cockerill's face was caked and seamed with smokeblack, sand and alkali dust, his eyes were narrowed to mere slits for want of sleep, and his mouth was gently drooling at the corners for want of a hot breakfast. His tobacco no longer held him patient, for the despatcher had chased him in for one long, last wait at dawn on a desolate, desert sidetrack.

"Yeh! I s'pose," he said solemnly while staring hungrily at the red-gold sun welt risen above the distant gray wastes, "I s'pose if they'd had railroads 'way over yonder in them 'Rabian deserts, where them danged *muezzins*, or whatever 'tis they're named, used to git out an' holler from the superintendent's office top when Pharaoh was a pup— Well, I reckon them railroad muslins wouldn't 'a' bothered their heads none about who's who in the all-powerful, more'n to yell out sassylike, 'Ther' ain't no Trainmaster but the Trainmaster, an' the Despatcher is His Blackjack!'"

"Meaning that he stabbed you good an' plenty last night, Dad?" Moxley queried with narrowed eyes.

"Sure pounded us good, this night gone," said Dad. "Seems like ther' ain't as many as two blind sidings in the hull Mojave Desert but what I was into 'em last night! And Ballard, the trainmaster, asleepin' in the caboose most o' the time comin' up, when he wasn't bullin' ahead to the engine an' givin' me merry heck for not gittin' over the road."

"Ballard? Come up with you, eh?" Moxley quizzed. "Where's he now?"

"Right over there in the despatcher's office. He give it out cold, last night, that he was comin' up to ride 'em up through the Big Rampart Pass an' down the other side to see how you fellows haul this twelve-hundred-ton.

"Come on, Ruddy," he said as he grasped the arm of his fireman, "they got company—an', anyhow, these husky ducks are too darned happy to float with us right now. Come on an' let's eat!"

"Say! Wait a second, Dad," Moxley called as he followed them around the point of the engine's pilot. "Just run your eagle eye over this!"

Moxley pulled an order-flimsy from his blouse pocket and thrust it into Cockerill's outstretched hand. Cockerill read with narrowed eyes:

HIGH LINE ROUTE
Telegraphic Train Order No. 57
Trainmaster's Office,
San Veritas, 7/9/1929.

For: Rock Rampart. To: C & E, 2nd & 3rd 22.
" No. 24.

No. 1, Brophy, Eng. 808, will wait at Binidah until ten twenty 10.20 a.m. and at Dorley until eleven ten 11.10 a.m. for 2nd & 3rd 22 and No. 24, Megan, Sones, & Tanner, Engs. 693, 639 & 694. J. E. B.

Conductor and Engineman Must Each Have a Copy of This Form.
Time received: 8.57 A.M. O.K. given at 9.00 A.M.

Conductor.	Train.	Made.	At.	Received By.
Megan ...	2nd 22 ..	Complete	9.03 A.M. ..	Labenberg
Sones ...	3d 22 ..	Complete	9.05 A.M. ..	Labenberg
Tanner ..	No. 24 ..	Complete	9.10 A.M. ..	Labenberg

"Um-hm!" Cockerill mumbled as he handed the order back. "C'mon, Ruddy. Number One, California Express, de luxe, da loo, mind you, is runnin' late out o' Bleachem with a skinful o' alkali and soda water an' it's a hundred to one shot that she's slobbering at the stack, an' it's a dead sure thing that these highflier dragomen have got 'help' against her far as Binidab, which they can't make, an' Dorley, which they can't make, an' they're due to hang up at Summit spur while we sleep good an' plenty! C'mon, Ruddy, I said let's eat!"

The four of them grinned at Cockerill's sardonic rendering of the order which needed no interpretation for them, and Moxley promptly took up the implied challenge.

"Never you cry for me about layin' up at Summit spur," he said. "Gi'me just one wink of a chance, an' there won't be any Ballard poundin' me for not gettin' over the road. He's due to get a swift little ride when I pull him. Me thinks I'll scare up his yallow streak, some, if he's got one, an' like as not we'll meet Number One—'da loo, mind you,' at Dorley!"

"So long!" they chorused among them as Moxley climbed upon his engine-deck and, quickly, the helper engines were made fast, the airbrakes tested, and Tanner's outstretched arm at the caboose had lifted and fallen in the "high-sign" for battle against the mountain.

The first slow exhausts welled from the engine stacks, took on a deeper rhythm as they curved upon the first upgrade, and presently the western mouth of Big Rampart Pass received and hid them on their battling climb to Summit tunnel and its Summit spur. When, at length, they had crept roaring through the tunnel and cut off the helper engines at the spur beyond the eastern end, Moxley resumed control of the brakes and the train.

Pitched steeply before him lay the miles of perilous descent, of three per cent grades and ten degree curves with rare tangents interspersed. Down and down to Dorley, to Binidab and onward through the rim of Colorado desert to Bleachem division-point on the Arkansas River.

Watching from the fireman's cab-window for the result of brake test, the head brakeman called across to Moxley: "Guy back there says 'right'!"

"Um-hm!" said Moxley with a final glance at the order which he had pulled from his pocket, and another sharp search of his watch dial which then marked 10.40 A.M. "Um-hm!" and he swung the little brass brake-valve handle to full release, caught back a sure control of the brakes as the train promptly started rolling forward, and was settling himself at his cab-window when Dan Gaunt yelled across the cab:

"Hey, Lem! Watcha doin'? We goin' to meet One to-day, or ain't we, huh?"

"Sure goin' to meet 'em, boys!" laughed Moxley as the train made headway.

"Yah!" snarled the brakeman from his perch on the fireman's seat-box. "Meet 'em where? On the first High Bridge this side o' Dorley? You got eight miles o' these grades to go an' less'n thirty minutes to do it in an' clear 'em ten!"

"Yeh, less'n thirty," urged Fireman Dan, "an' a top-notch speed limit of twenty miles an hour on these corkscrew grades! Say! Pinch 'er down and back 'em up to clear again, won't you? The helpers are still up there!

We can wait better than we can hit One, can't we?"

"Meet 'em at Dorley," grinned Moxley amid the increasing rumble of the engine, "and take tea in Bleachem as usual."

"Well, me, I can ride where you can," snapped the brakeman, "but I got folks at home, and you want to pinch these buggies down good an' plenty an' lemme get out an' flag ahead for you if we have to.

"That bunch back there in the 'crummy' is havin' spasms right now! Don't you see 'em tryin' to swing you down?"

"And J. E. B. a ridin' with 'em, at that!" seconded Dan Gaunt. "Oh, no!" he jeered. "We won't get a thing done to us for this ranikaboo run—not a thing!"

But the rising roar of the wheels and the swishing passage of the rock cuts were now drowning out their protests and they gave it up and sat tight upon the seat-box at the window.

II

BACK in the caboose, the "crummy," as the engine crews like to call it, Tanner swore softly under his breath when the train started, leaned far out of the cupola window and waved an imperative stop-signal which brought no response from the engine. He drew his head in with an angry jerk and was reaching for an air-valve to set the brakes from the rear.

"Whoap!" promptly rang out the command of Ballard, the trainmaster. "Don't pull him down from the hind end on this grade! Break 'em in two, lose some of 'em, block the line for sure against One, maybe!

"It's a wild ass of a play, sure enough, but let him go! He's got a chance, as long as he can hold 'em together—and no more than a chance, but it's a shade better than trying to pull him up short here!"

"He's got hold of 'em, so far," grudgingly conceded Tanner as he felt the steady grinding of the brakeshoes on the rolling wheels below. "Blast him!" he added as a crack-the-whip lurch of the caboose careening through the first reverse curve banged the side of his face full against the window frame and set him rocking upon his high lookout perch.

"Hey, Sandy!" he shouted down to the rear brakeman riding below. "You gotta take your pick-handle an' ride out on top, pronto! Get a move on you an' climb out quick. We're a goin' to need it if that laughin' hyena fools his air away! But don't you touch 'em with yer club till he hollers with the whistle—then, twist 'em good an' plenty. Climb out!"

"Climb a little red balloon!" yelled Sandy. "See 'em rock, will yah!"

"Climb out!" roared Tanner, and Sandy clutched his brake-wheel club, clawed his way out and up to the deck of the last careening box car and dropped flat upon his stomach and his club, where he clinched a double hold upon the runboard.

Far ahead, with her great, black muzzle pointed sharply downward, the 694 and Moxley were plunging, rocking, staggering under the pressing weight of their big, unspoken problem of time, speed, space, safety. "Safety last!" flashed through Moxley's ironic mind, but he was not smiling now.

From the book of rules, that iron-clad book—so often more honored in the breach than in the line and letter of its observance—fragments of wise laws begot of deep tribulations echoed almost like spoken words within Moxley's high-keyed senses. "In case of

doubt, take the safe course!" "All eastbound trains have schedule right of track over westbound trains of the same or inferior class, unless—unless—" But the book of rules and its priceless dictates were only fluttering above the real consciousness of Moxley, somewhat as the black silken crown of his wind-whipped cap was fluttering above the seething brain of him.

"PINCH 'EM, I SAID! THROW THAT LEVER OVER AND HOSS 'ER BACK, OR I'LL—"

While the speed ran up from fifteen, twenty, to thirty-five miles an hour and more, and jagged yellow rock walls flashed past his face to the right, while cedar spires of vivid green waved a smiling, solemn sort of greeting and farewell from dizzy brinks and deep defiles to his left, the insistent thing that came uppermost in his mind was that final, uncompromising phrase in the beautiful script of the order-flimsy in his pocket: "Will wait . . . until . . ."

And, presently, when that hurtling load of twelve hundred tons rolling wildly behind the staggering engine had thundered across the first high-stilted timber bridge above a deep and ragged gulch; when it had steadied itself again from the next plunge around another great hip of the mountain; when there were yet nearly a thousand feet drop to run in six miles with few

minutes to do it in, that phrase attuned itself to the quick rhythm of the rushing wheels and beat its deadly meaning deeper into the mind of Moxley.

Ceaslessly, maddeningly, it ran on and on: "E-lev-en ten, E-lev-en ten, Will-wait-will-wait, E-lev-en ten!"

Moxley, driven by the incessant beat of it, jerked out his watch for the second time in that fourth mile which was then speeding out from under him, and read from the dial, 10.51.

His eyes shifted their glinting points of fire from air-gauge to brake-valve, from throttle to reverse-lever, then down the yawning pass ahead, and back along the writhing length of red-brown train. In that one swift, backward glance he saw the towering top of a high deck load of lumber burst its side-stakes and hurl that scattering top load sailing, board by board, in airy flight far out over the rim of rock and down, down, deep among the waving cedars in the pass.

Before he could turn his head from that transfixing sight, a hard, gripping hand clutched at his shoulder and the wiry front brakeman was hissing in his ear: "Seen that, didn't yuh? Now pinch 'em down like I asked you!

"Give 'er all you got, or I'll pinch 'em for you!" Bill Dart yelled above the roar of track and wheels, while his clutching fingers sank painfully into Moxley's shoulder.

"Get away!" roared Moxley with a heavy sweep of his arm. "Back up! You don't buckle no train o' mine on this grade!" and Dart went reeling back against the coal-gates of the tender.

By straight ill luck, his outstretched hand struck the coal-pick hanging in its loose sheath upon the coal-gates. He steadied himself for a moment upon the slippery lapsheet of the wallowing deck, seized upon the smooth handle of that half-hammer, half-pick and lunged angrily forward to a grasping hold upon the steel of the cab. He leaped forward upon the deck and with coal-pick uplifted to strike shouted at Moxley in that uproar of rushing wind and drumming wheels:

"Pinch 'em, I said! Throw that lever over and hoss 'er back, or I'll—"

Moxley's hands did not move, the red in his face ran deeper, the glinting points of light in his narrowed eyes shot out a deadlier gleaming, and his left foot drove out suddenly sidewise from its place beside the quadrant on the footboard. It struck the brakeman full in the pit of the stomach and half doubled him where he reeled upon the tilted deck. He pivoted uncertainly upon his heels, struck upward and across the narrow space at Moxley's head, and the smooth handle of that much used pick slipped from his grasp and let the deadly thing go glancing across Moxley's crouching shoulders and crashing out through the glass of the cab sash.

As Dart swung forward out of balance against Moxley's knee, Moxley, with one move swift as the stroke of a mountain lion's paw, shoved the brakeman off with his left hand and followed through with a quick, leaning right-hand blow which caught the brakeman squarely on the mouth and sent him stumbling backward against Dan Gaunt on the fireman's seat-box.

Dan's arms, from many labors, tough as wire, instantly closed around Dart while the brakeman raved and struggled to free himself for more battle. But he could not break that clinging grip, and short, jerky bits of good counsel were already sounding close to his ears.

"Slow down, Bill, slow yerself

down, man," the wiser fireman was whooping into Dart's reluctant ear. "You can't do nothin' like that here! Wait! Wait! He'll hold 'em, he's gotta hold 'em! His hide's ridin' on this wildcat deck, same as ourn!"

"I got folks at home, I told yuh!" yelled the brakeman. "I got old folks at home. 'Tain't me I'm thinkin' about," he growled as he wiped his bleeding mouth upon the back of his hand, but his struggling had ceased.

"Yo tambien, hombre!" said Dan as he loosed his grip. "Me, too, pardner!" for he saw that the edge of that battle was turned. "Climb up, sit tight," he said with a wave of his hand toward his seat-box. "That guy over there has gotta hold 'em and hold 'em good and quick, or yell the whistle for club brakes."

"He'll do one or t'other—an' it won't be next week, nuther!" said the brakeman sullenly, and the two of them stepped up, resumed their grips on the window-ledge and relapsed into hard-jawed silence with frequent and hostile glances across at Moxley, who sat staring straight ahead.

III

With the thunderous monotone of that cavalcade of rushing wheels he felt and sometimes heard the heavy sag and quick rebound of springing journal boxes tried to the limit of their travel in the engine frames beneath him. Twice, when the shock of high-tilted curves dashed his shoulder heavily against the cab side and nearly rocked him from his seat rebounding, his face went white as his left hand shot deftly to the brake-valve and tightened his grip upon the wheels.

Once, when a long, straight tangent of track opened out ahead of him and the gleaming rails seemed speeding upward under him, drawing swiftly with them the forbidding lower battlements of the cañon as though to smite and crush him where he sat, his hand went groping uncertainly upward for the whistle-rod, and his face went gray again under its grime. But, instantly, his hand fell steadily to the brake-valve handle, the ready air gushed forth until he shoved the handle back to lap, and the color surged back to his face as he felt the quick response of brakes still holding hard upon the wheels.

"No yelp from me!" he ground out unheard through his clenched teeth. "No call for 'shacks' with clubs on my decks!"

In that way, those few brief miles were unreeling at a deadly pace beneath him, the precious minutes vanishing at a threefold rate, four, another five, and again five minutes had fled never to halt nor to return, and when Moxley and the 694 swept around the last wide curve and headed down the mile of steep, straight track which leads to Dorley and its two long crescents of sidetracks hugging the high cañon walls of that stage of level cañon floor, five saving minutes only were left for the meet with Number One.

Dan, the fireman, and his friend Bill, the brakeman, loosed their tense grip upon the window ledge and swung around together on the seat-box. With one accord and no word spoken they drew and compared their watches side by side upon Dan Gaunt's knee.

Eleven five, they saw in sure agreement to the second. Five steadily pulsing rounds more of those little second-hand and Number One would come double-heading, storming up the echoing cañon into Dorley to reclaim her superior right of track, to climb up and onward through the winding grades

unhindered, and on and onward to the gently rolling tides of the Pacific.

Five minutes, and with speed but little checked the red-brown drag of freight was hurtling down to meet her, to let her pass safely onward, or—

"Ye gods a'mighty!" exclaimed Dan Gaunt with his eyes still fixed upon his watch dial. He glanced hastily across in resentful wonder at Moxley's rigid face, and Moxley gave no heed.

Bill Dart thrust his own watch back into his pocket, made one savage swipe of the hand across his blood-clotted chin, and reached high above his head under the hooded cab roof. He jerked out a smoke-smudged red flag from its ordered place there and sprang clear to land steadily on the engine deck.

With the red flag still rolled tightly upon its short staff, he stepped quickly to the gangway and, clutching the handirons as he turned his face half about above his shoulder, he fixed one half despairing, strangely mingled look of contempt, hatred and respect upon Moxley's hard set face.

In those fleeting moments, the brakeman stood wind-whipped, patient, before venturing down upon the engine steps, waiting, waiting the vital moment when he might drop off and run ahead of the engine's decreasing speed to throw that fastlocked switch down yonder, whose quick-thrown lever would point safety for them all.

Failing that, his hope and theirs was fixed upon flagging beyond against that hurrying doom which hovered closer and closer above the sounding cañon walls.

But that last soaring flight downgrade was holding too long its almost unabated pace and suddenly Dan Gaunt's long tried nerve broke. He sprang to the engine-deck and across to Moxley's foot-board. Moxley's hand upon the brake-valve handle lifted quickly for an instant as though to wave or strike him away, but it fell instantly again to the valve-handle as the fireman pressed closely against him, and Moxley only drew another whispering, tightening blast of air.

"Moxley!" he shouted close to the engineer's ear when Moxley had made one stooping forward lurch, as though to grasp the big reverse-lever, but sat upright again without having touched it. "Moxley, for men's own sake, throw her over and give her sand! We're a goin' to run by! We're a goin' to skid across that flat down yonder and dive on to a smash of splinters and pulp for us and One!

"Give 'er sand! Throw 'er over, quick an' plenty!" And he leaped across the deck and back to his watching at the window, while Moxley, for that moment, gave no sign of having heard.

And then the rare thing happened. Regardless of all long-drawn arguments about engine reversed in a pinch with airbrakes fully set, or engine not reversed and brakes alone holding hardest; regardless of train and engine ethics which rule it rank insult for fireman or brakeman to interfere with engineer while out on the line, Moxley bent forward in one swift reach and when he straightened up in a strong backward pull the big reverse-lever was clutched in both his hands and he latched it well in the back half of the notched quadrant.

He struck the little sanding-lever to open position and dry sand went promptly spraying upon the rails and crushing to gritty powder under the driving-wheels. He opened the throttle with a firm and gentle pull upon its lever and ready steam went darting into the engine's cylinders and sent up

the first choking exhausts from the stack.

The driving-wheels locked and skidded for a moment, went rolling on again, skidded, rolled and skidded again while a rumbling crash of couplers and bumpers rippled back through the crowding train and set its shock heavily upon the caboose and its crew.

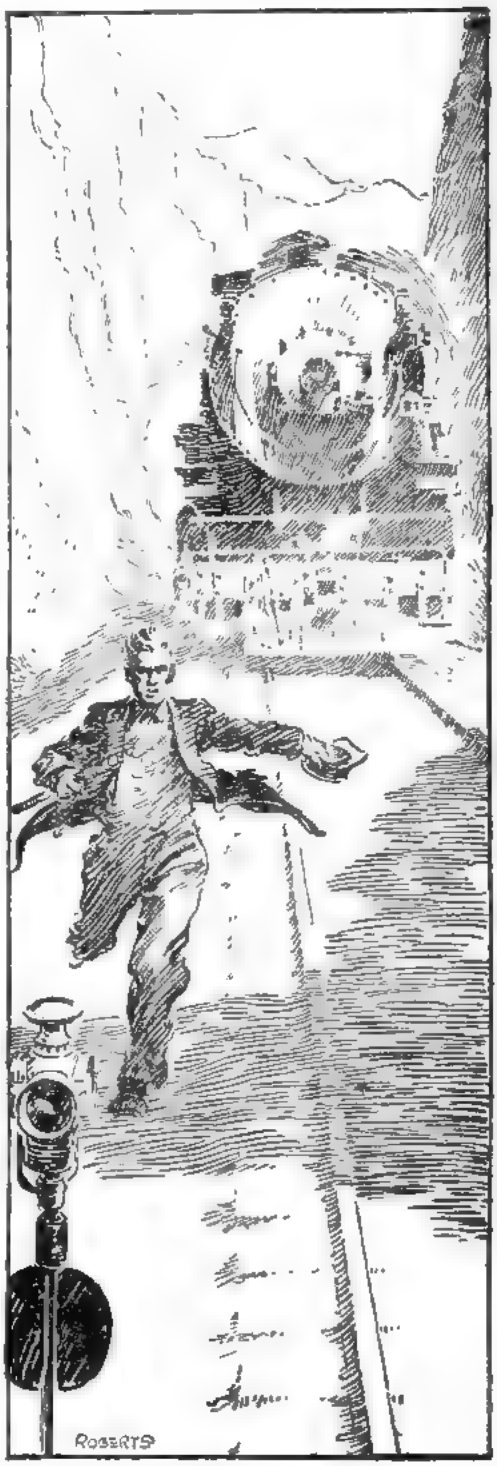
"Throwed her over!" spoke Ballard from his perch in the cupola.

"Time!" shouted Tanner from the other side. "Time, long ago, but he's chokin' them down! We've still got a chance if he don't skid too far past!"

Moxley choked them down, indeed. He choked them until puffs of powdered sand and spurts of fire shot out from the drivers and the rails. He squeezed them and skidded them, but never to the point of flattening tires—and then the moment came when Bill, the brakeman, swung free of the engine-step, down upon the ballast and the ditch and ran as he never had run before to beat the grinding engine to the switch.

By three engine-lengths he beat it, slammed his switch key into the lock, jerked lock and lever free in the same motion that threw the switch to place. He relocked the switch, stepped back to clear and with a briefly waved high-sign of the hand and a shouted "Come on! High-ball!" he sat breathlessly down upon a tie end, sprang up again as quickly, caught the handirons of the slowly passing engine and climbed to the deck.

Moxley swept his reverse-lever to go-ahead, released the air, and with no more sound of choking from the stack, no more of racing uproar, the 694 and her crew calmly, all but silently, obeyed the voiceless command of Dorley's hermitlike little telegraph station standing silent, alone in the midst



HE RAN AS HE NEVER HAD RUN BEFORE TO BEAT THE GRINDING ENGINE TO THE SWITCH

of the cañon's brooding solitude and at the middle of the cañon's widened floor.

IV

High above the modest station's spreading roof, the red arm of the semaphore pointed levelly to the right-hand wall of the cañon, as they ran. The blunt nose of the 694 veered smoothly through the switch-points, the long line of punished wheels in the shaken train came chuckling softly after, and the red-brown terror of the moments gone curled slowly into the shadows deep at the base of that towering cliff. A ripple of halting drawbars ran back as Moxley gently set the brakes. Then the 694, panting from its air-pump like a frightened wild thing come to refuge, crept easily to its stop, and far back the ill-used crummy was at rest.

Sandy, the flag and rear brakeman, still gripping his brake-wheel club, closed and locked the switch at rear and ran to hop on again as the last forward movement ceased.

"Been clinchin' that thing for the last fifteen minutes till I didn't even know I had it!" he grinned at Ballard, the trainmaster, and tossed the stout hickory club clattering into the cluttered lower bunk.

"A good thing to clinch, I'd say—in the last half hour," replied Ballard, and his face was grave. "I don't know just why you didn't get a call to use it, but we are going to look into that little matter and some others!"

"Sure will!" said Tanner, turning from his angry staring about the wrecked interior of the caboose. "Look at that, will you, Ballard? 11.08 A.M., by gosh-all-hemlock, an' we ain't been in to clear for more'n thirty seconds. Cleared One's time by two measly minutes, and look at this caboose!" He thrust his watch back into his pocket.

"I have looked," said Ballard very soberly. "I'm glad that I can look, can see nothing worse than this, but I say we shall look into it further."

"Right now, so far as my end of it goes," barked Tanner. "I got to go up front for orders, an' I'll say a few words to that highdaddy eagle-eye on the engine!"

He dropped off and went running forward along the train while Ballard, with the brief caution, "Easy, then!" followed more deliberately toward the engine.

"Say!" shouted Tanner as he swung up through the gangway of the 694 and planted himself flat-footedly upon the deck. "Say! You highdaddyin' sardine, what the red-roarin'-smoke-slingin'-hot-spot did yah think yuh was doin' up yonder in that snake's nest o' steel an' rocks? Huh? Say! Did yuh think you was jerkin' the air mail clean across the top?

"That caboose o' mine, it's—"

"Slow down, you! Who you talkin' at?" and Moxley, without moving from his seat-box, went on calmly wiping his hands with a bunch of cotton waste. "Shake the crummy up some, did it?"

"Yah, crummy! That caboose is clean as any kitchen you ever smelled! That caboose is my home, outside o' Rock Rampart. I sleep in it on short turnarounds down at Bleachem yards. I had things to eat in it. I had a stove an' a desk.

"Dad dang yuh, I had aigs an' ham into it, an' the stove is layin' sidewise in the lower bunk an' it took a hull bucket o' drinkin' water to keep from burnin' 'er up complete, while you was donatin' them thousand-dollar boquets

o' yallow pine boards to the howlin' bobcats down in the bottom o' the pass!"

"Poor crummy! Poor bobcats!" murmured Moxley with a steely smile.

"Yeh, poor bobcats! An' my caboose is a sight, I'm tellin' yuh! Them waybills, them manifests I had on my desk, they're splotched with smears o' busted aigs an' black with soot where the stovepipe dumped itself onto 'em—an' by the high-howlin'-helpus, Moxley, if you make one more wise yelp about that caboose, I'll yank yuh offen your perch an' waltz yuh 'round some right here on yer own deck!"

"Not this trip!" spoke the steadying voice of Ballard as his head appeared in the gangway. "Not this trip, Tanner," as he stepped up upon the deck. "We've had enough and to spare of rough-house for one run—What's this?" as he turned and saw the front brakeman tenderly fingering his incrusted and swollen lips. "You hit that brakeman, Tanner?"

"His mouth didn't fit his job," interposed Moxley without venom, "and I had to fix it some! Fix it quick, for there ain't no 'shack' livin' that'll ever take a running engine out o' my hands. Not none!"

"Me, I made a bad break," mumbled Bill Dart, "but ther' was reasons!"

"Likely," Ballard nodded thoughtfully, "likely enough, but we can't hold kangaroo court here now.

"Moxley, what were you trying to do with this hairline play, and not even a high-sign to go given you at Summit? We had no such urgent call to get down here! By a bare two minutes, we have cleared Number One's stated time of eleven ten. By the actual living bulk of her, you have put no more than three minutes, instead of ten, between your front-end and hers with her doubleheading engines.

"Hear that! Already she's shaking the air from just around the Point of Rocks! Hear her? She's fallen down just one more minute beyond her eleven ten to get here, and it's eleven ten right now.

"I hate like sin to report you, Moxley, but you are very sure to hear more of this affair. I've no right to keep it from the superintendent, and he's sure to learn of it, anyhow. Mr. Starbuck don't like a paint-scorching meet.

"We like your work, within reasonable limits— Men like you, within broad limits, and I'll do the most possible to hold it down to the facts that you do get over the road, and that you did get into clear. But there will be a letter waiting for you when you get back to Rock Rampart. I have no doubt of that. What the dickens got into you, man?"

"Much obliged," nodded Moxley. "Mebbe feelin' extra good this morning and," he added with a fleeting smile, "guess I wanted to get over the road some. If it turns out that you have to hang anything on me just for that, I hope you'll make it a little bell instead of a 'can.'"

"If it should prove to be only a 'bell,'" said Ballard very gravely, "it would ring 'bad judgment' into your record—and that's one of the very worst things that can happen to a railroad man—except the 'can' itself.

"But let that ride, for the present. There comes the nose of Number One's helper-engine leaning around the point! It will be no worse than eleven eleven when she pounds past the board over yonder.

"Cheer up!" he said as a grim smile touched his keen face. "Cheer up! We are all alive and all in one piece

apiece!" and he dropped from the engine steps and crossed rapidly to the station.

The throbbing double roar of the two hard-driven engines now broke fully into the echoing cañon. A mellow, higher, deeper note welled from the whistle of the leading engine and, while that sonorous, questioning, almost commanding station-call was still sounding, the arm of the operator sitting watchfully within his lonely window-bay moved quickly and the red-board high above fell noiselessly to the safety angle upon the mast. The way was clear.

Two quick, short blasts from the whistle, in answer, and the beautiful line of Tuscan-red coaches came curving, gleaming on upon the brief, flat tangent, thundering heavily past the station, past the now protecting switches.

With her valiant train crew, her half million of Federal reserve notes and gold bullion in the express cars, and her three hundred trustful and happy passengers reckoning nothing of the hurtling doom which had all but dashed them weltering to the depths, Number One went shouting, climbing up that winding western way of steel and, presently, was gathered safely to the keeping of the heights.

When Moxley, on the third day thereafter, finished his return trip with freight from Bleachem yards he found a letter awaiting him in Rock Rampart roundhouse office. A glance at the envelope marked "Superintendent's Office," and another at the bevy of men standing at the call-board near by, showed to him plainly that the word of his scarehead play on the mountain had gone around — had passed from mouth to mouth along the line.

"Starbuck, eh?" he said.

"Guess you got a raise, Lem!" ventured one with a covert grimace. Eyes now turned to the envelope held steady in Moxley's big hand.

"Not more'n I can carry, I reckon!" said Moxley, and he drew aside among the housed engines that he might read without interruption what Starbuck had written.

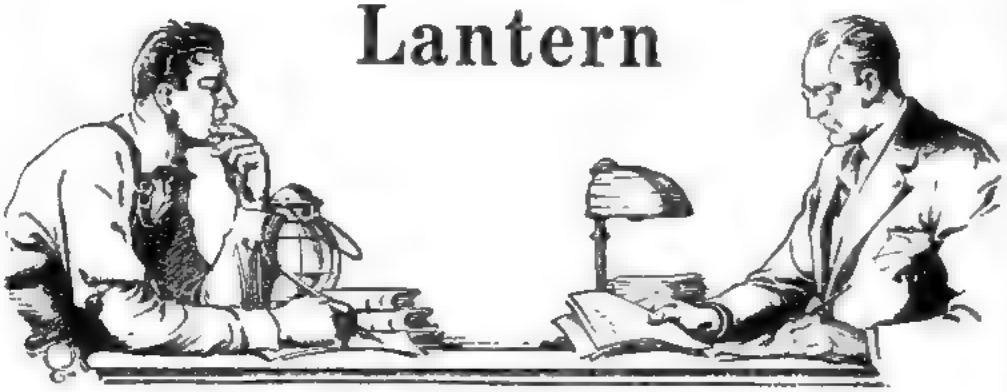
"Um-hm!" he muttered, and replaced the letter in his pocket. "Suspended for investigation, eh? Bad judgment! They've sure got a nick in my ear, on that slithering Dorley meet with One!"

In due time and manner, Moxley had his "hearing." When the "ranikaboo run" from Summit to Dorley, as Dan Gaunt had promptly called it, had been thoroughly threshed out with some other things of a kind that bobbed up, Superintendent Starbuck in his chair swung around from a long, fixed stare out of the window, and delivered his decree:

"For the once, Moxley—but never a second one—we will allow you a 'Scotch Verdict:' 'Not guilty. But don't do it again.'"

That clear vision which enabled Starbuck to read deep into the mind and heart of one of his best engineers saved Moxley. And now, when he goes thundering at night through the mountains, when the thrumming wheels press hard upon some outer curve of shining steel, the recurrent beat of them comes up to him in the cab as a vibrant chant, "Never-again! Never-again!" Then Moxley, in the ruddy half darkness of the rushing engine-cab, with a vivid memory of that hectic rush down the Big Rampart Pass, sometimes chuckles to himself a gritty sort of echo to that warning song of the wheels: *"Never-again! No! Never-again!"*

By the Light of the Lantern



WE want to be as useful as possible to our readers, but, because of the great popularity of this department, we are obliged to impose certain restrictions. It is limited to the answering of questions of an informative, technical, or historical nature only. Letters concerning positions WILL NOT be answered. All letters should be signed with the full name of the writer, as an indication of his good faith. We will print only his initials. The editor begs that readers sending in questions will not be disappointed if the answers do not appear as early as expected. Delays are often unavoidable for two reasons: the magazine is printed two months in advance of the date of issue, and it frequently takes weeks to secure correct answers, owing to the complexity of the questions.

J. M D—One cause for a decrease in the rate of feed in lubricators is contributed to impurities being carried into the condenser of the lubricator from the boiler and then through the water tube where these impurities act to form a sediment and reduce the size of the water passage. This, of course, will decrease the amount of water admitted to the oil reservoir and dispense a lesser amount of oil which decreases the rate of feed

The best method for correction in condensers of this kind, is to close all feeds and the water valves. The drain cock should then be opened and a half pint of water should be allowed to drain off. Closing the drain cock again, open the water valve very quickly. The pressure of the condenser should then force the sediment to the bottom of the lubricator where it should be allowed to remain until the lubricator is fed empty of all oil. The next procedure would be to blow it out in the usual manner. There is a danger of the sediment solidifying if it is allowed to remain in the water passage too long so that it can't be blown out. If this should come to pass, it should be reported so that the obstruction can be bored or cleaned out with a wire.

IN what cases is the throttle valve placed in the front of the engine?—C. C. H

On most of the latest type of power being built by the Baldwin and the American Locomotive Works, the throttle valve is placed up at the smoke box end and is advantageous in that it allows drier steam to the branch pipes and at the same time it cuts down long footage of steam travel through the dry pipe before reaching the cylinders. The North Pacific locomotive as described in the December number of RAILROAD MAN'S MAGAZINE is a good example of this type of throttle valve construction

IN traveling about the country I have noticed where trains have been stopped on main line tracks outside of towns, that the brakemen are usually to be seen a few steps back of the caboose with their fusees and other equipment. Can you tell me if modern day block signal methods make it unnecessary for brakemen to go back like they use to?—B. W.

There has been a great deal of discussion on Rule Ninety-nine which applies to the proper protection of the rear end of a train. To answer your question specifically is rather difficult because certain roads have special regulations which provide that the brakeman or flagman does not have to go back any distance behind his train, where such track is protected by automatic block, and where it is possible for the brakeman to see that the signal last passed is set at stop. Undoubtedly there are a great many roads which pay little attention to the standard requirements of Rule

Ninety-nine which specifically states that whenever a train comes to a stop on the main track the brakeman must go back immediately, a sufficient distance to protect the rear end of his train. He should be equipped not only with fusees, but with torpedoes which should be placed on the tracks where there is the possibility that another train will overtake his train before he can get sufficiently far away. It is a rule which is susceptible to individual interpretation on individual railroads, and if you have any particular line in mind it would be best perhaps to take up with division operating officials of that road.

NO 97 is a third-class train westbound, and receives an order at B to the effect that No. 16, a first-class eastbound train, will wait at F until 11 52 A.M. for No. 97. How would No. 97 be governed if it arrived at F at 11 30 A. M.? Would it be allowed to proceed?—T. F. M.

Under no circumstances could No. 97 leave F until the order had been fulfilled. No. 16's failure to arrive at F before the prescribed time of the order makes no difference It would be up to No. 97 to take siding and wait until No. 16 arrived or until given a new train order to govern its movement.

S. S. N.—To answer your inquiry it is best to refer you to the Railway Engineering and Maintenance Cyclopedia which is published by the Simmons-Boardman Publishing Company, 30 Church Street, New York. On page 872 of that book you will find complete data on mechanical and electro-mechanical interlocking plants and devices. There are thousands of these plants in service at the present time, and the need for them is growing larger every year. It would be possible for you to secure a permit from the division superintendent nearest you to allow you to inspect the workings of one of these towers and all of the various devices.

M. A. C.—The continuous girder turn table has been brought out by the American Bridge Company designed to replace the old time cantilever tables which require the balancing of locomotives, together with deep pits and drainage problems. The new type of turn table will measure anywhere from eighty feet to one hundred and twenty feet and the centers are either of the roller or disk bearing type with a normal capacity of 350 tons. This turn table allows an engine to be run upon it without regard to balancing and it is so put together that three-eighths of the dead load is carried by the end trucks. Where these turn tables are driven by power units, the use of heavy type laterals and vertical cross frames are resorted to so that the table is made rigid transversely, particularly at the center. These tables are fast taking the place of the old time cantilever jobs in virtually every section of the country

WHAT is becoming of the old time cattle guard that we used to see along the railway at almost every crossing?—B. R. D.

In only a few States are the cattle guards required by law. Because of their doubtful necessity and because it costs so much to maintain them, they are fast disappearing in those States which do not make them compulsory equipment. A later development in stock guard equipment is seen in the steel-surfaced guards which are usually made of perforated metal plates, spiked to the ties and having high angular pieces bent upright to form sharp spikes. The A. R. E. A. requirements on these guards prohibit them being built where projecting surfaces might be caught by loose or dragging portions of rolling stock equipment, and also they should be so constructed as not to rattle when trains pass over them.

WOULD it be possible to run with a broken cylinder head on a locomotive?—R. T. W.

It all depends on whether it is the front head or the back head that is broken. The first thing to do would be to clamp the valve stem with the valve in mid position, disconnect the valve rod, and in the event that the front head is broken, it is necessary to take down the main rod. If, however, the back head is broken, and the guide bars are damaged, it is necessary to take down the main rod and block the crosshead so that the piston is held in one position. Under certain circumstances it would then be possible to proceed under steam on one side of the engine.

W. B. A.—It is not possible to give you the rate of pay governing firemen because these rates vary with type of engines, sections of the country and other conditions which require more specific information

I. D.—While it is not universally true, eastward trains on most all railroads in the United States and Canada are designated by even numbers, and westward trains by odd numbers. Trains superior by direction vary on

different systems. On some railroads westward trains of the same class are superior by direction, while on a great many other railroads the eastward trains of the same class are designated by time card as superior by direction. If you will be more specific as to the railroad you have in mind, we will be glad to tell you exactly what its time card says.

R. C.—The tank car equipment of the Root Refining Company is as follows: 2 cars of 60,000 lbs. capacity with 6,000 gallons rated capacity; 114 cars of 80,000 lbs. capacity with 8,050 gallons rated capacity; 100 cars of 80,000 lbs capacity with 8,100 gallons rated and 50 cars of 100,000 lbs. capacity with 10,000 gallons rated; a total of 266

C. W. B.—The Thornton & Alexandria Railroad Company is still in operation with its 24½ miles of railroad. It operates a daily schedule between Hampton, Ark., and Tinsman, Ark., with its one locomotive

CAN you please tell me what some of the functions and uses of the back pressure gauge are?—E. E. K.

(Answered by J. G. Walker, locomotive engineer.)

It is a well known fact that back pressure is very detrimental to the proper operation of a locomotive. This gauge is installed on the latest motive power for the purpose of showing the engineer just what amount of back pressure is being developed.

The dial of the gauge is equipped with two hands—a red and a black one. The black hand on the gauge is connected to the steam chamber at the valve and the red hand is connected at the exhaust chamber.

Statistics show that every pound of back pressure is equal to 30 horse power lost. Therefore, it is very essential to keep both hands on this gauge as near together as possible by a short cut-off of the reverse lever and a wide throttle. Six to eight pounds, as a rule, is as near as can be had and at the same time have the engine do the work after the train has been in motion.

Freight locomotives will show more back pressure than passenger locomotives, as the latter as a rule have exhaust clearance and do not retard the steam at the end of the stroke.

On the zero end of the gauge a vacuum gauge shows when there is no steam in the cylinders to cushion the piston, and a light throttle will keep the black hand from indicating vacuum pressure, or in many cases where drifting valves have been applied, will overcome the black hand indicating vacuum pressure. With the throttle wide open the black hand will indicate the steam pressure in the valve chamber which in many cases will register from ten to fifteen pounds lower than the steam gauge on the boiler, if the gauges are correct. Therefore, the nearer the red and black hands are together, the less back pressure is being developed, and the farther they are apart the opposite is true. There is a vast difference in the operation of a locomotive equipped with the back pressure gauge and one which is not so equipped. In fact, the back pressure gauge serves a mighty useful purpose in fuel saving.

R. N.—There are several ways of interpreting Rule 93. In fact, this rule varies with different railroads in different localities. The usual practice is that any engine or train may use the main track within defined yard limits, providing they protect against first-class trains. This means that second and inferior class and extra trains must move within the yard limits prepared to stop, unless the track is seen or known to be clear. The question of what trains must be cleared or protected against and those that must move prepared to stop are usually optional with the individual railroad. Rule 93 provides that if any train or engine occupies the main line on the time of a first-class train or any section of a first-class schedule, or a first-class train occupies the main track on the time of another first-class train or section of first-class schedule, such train must be protected.

WHAT is the D-Form R order?—M. O. W.

This order is provided for the movement of trains against the current of traffic on two or more tracks where trains are operated by the means of block signals. A sample form, for instance, of this order would read:

> No. 8 has right over opposing trains on No. 1 (or westward) track A to H, or
>
> After No. 71 arrives at A, No. 74 has right over opposing trains on No. 1 (or westward) track from A to H.

Before No. 8 is authorized to move against the current of traffic from A to H, the westward track much be cleared of all opposing trains and the D-Form R order completed to the operator at H, and to all opposing trains at the first station (G) preceding station H, at which point the train returns to the eastward track, also to the operator or signalman at each intermediate station between the limits and the reverse movement under this order.

This Passenger Business

Highballing the Varnished Wagons to Gain and Hold the Big Bulk of Traveling Patrons

By Franklin Snow

TALK about varnished wagons!

That's just exactly what a lot of railroad gentlemen to-day are doing. These gentlemen range in official capacities from district passenger agents on up the pile to the presidents. And they are talking in plenteous measure. They are talking in flowing terms and are backing up the language with smooth action. They are having a merry time.

And what is it all about—this passenger business?

It is about the efforts of the railroads, by and large, to make a terrific stand against the loss of business which other lines of transportation have brought about. The bus, for instance, cutting into the short haul traffic. The private automobile. And it is an interesting story.

Most of us who are railroading to-day can remember when we used to look on the passenger department as more or less of a necessary evil—something to be tolerated and pointed to as non-productive of revenue but necessary to accommodate a hard-to-please traveling public.

"Take 'em all off—them passenger trains—an' we can save the road money."

Yes. You used to hear this just about everywhere you went. But no more. Like a great many other things, those days are gone forever. Passenger trains do pay, are paying to-day, and will pay in the future if a new type of traffic man knows anything about it. They pay in advertising and they pay in revenue, per car miles.

This passenger situation is a serious matter; it is just as important to the men and women along the line as to the main pins. Travel cannot fall off indefinitely without drastic reductions being made necessary. It is not so momentous a question, perhaps, to the Pennsylvania and the New York Central, with their countless limited trains between the great Eastern cities, as it is to the roads traversing more remote districts. It is a problem which affects the enginemen and trainmen just as intimately as the dining-car crews; the ticket-sellers are as immediately interested as the shopmen or the roundhouse forces, or the dispatchers and operators; the towermen and switchmen; the sectionmen and the car-inspectors.

So, when the Golden State Limited of the Rock Island starts its flight across the prairies of Illinois *en route* to Los Angeles there will be men all along the line who will speed it on its way in the knowledge that the railroads need every bit of energy, of speed, of service, to hold their passengers in the

face of competing agencies of transport. Or, as the Santa Fe's Chief speeds westward across prairie, plains, mountain passes and desert to the sun-kissed Pacific slope, the same smooth-working machine will be found clearing the way for the train which is holding its own even in the face of intensive competition from airplanes overhead.

INAUGURATION OF THE COMMODORE VANDERBILT P E. CROWLEY, PRESIDENT OF THE N Y C., IS SHOWN AT THE LEFT WILLIAM K VANDERBILT, A DIRECTOR, IS IN FRONT OF THE DOOR, WHILE THREE NEW YORK CENTRAL GIRLS ARE DECKED OUT IN THE GARB OF THE 60 S, WHEN THE COMMODORE FIRST BECAME INTERESTED IN RAILROADS

Be it the Coast Line's Florida Special, sweeping southward through the pines, palmettos and palms of Carolina, Georgia and Florida; the Great Northern's Empire Builder, the Northern Pacific's North Coast Limited or the Milwaukee's Olympian, staging their daily race from Chicago to the North Pacific Coast; the Canadian Pacific's Imperial or the Canadian National's Continental Limited; the Baltimore & Ohio's Capitol or National limiteds; the Missouri Pacific's Scenic Limited or the New Haven's fleet of limiteds, the Senator, Merchant's and Knickerbocker, the men behind the scenes on every line are doing exactly the same thing—making railroad service so flawless that neither airway, highway or waterway shall take from the railroad the business which makes necessary the present force of workers

Passenger Train Improvement

That the roads are winning their battles, and are making passenger travel so perfect that people want to use the trains in preference to other transportation, is being proved every day in every quarter of the country.

LUNCHEON IS SERVED ON THE PENNSY

If you've got a hunch that passenger traffic can't be made to pay, just take a look at some of the evidence. You might check up the earnings of the Scenic Limited on the Western Pacific pike, or the Blue Comet on the Jersey Central. But just so everybody will know what we're talking about, we'll cite what advertising and plugging can do to a couple of fancy varnished shots that have become institutions in railroading. We'll talk about the New York Central's famous Twentieth Century Limited and the Pennsylvania's equally renowned Broadway Limited.

Railroads are learning how to advertise their passenger service. They are learning how to do things for the day coach passenger who, until recently, was given a filthy car in which to ride and received little or no consideration. This day coach passenger, the railroads have found, is tremendously important in the revenue columns, and something to be considered. He now is being given chair car equipment at no extra cost, and a few of the comforts of traveling life.

They lead that growing fleet of trains which cover the 908 miles of the Pennsy and the 960 miles of the Central between New York and Chicago in twenty hours—a time which, incidentally, bids fair shortly to be reduced to the eighteen hours which was attained more than a score of years ago, but later lengthened to twenty hours because of the then existing hazard to track and train by reason of such fast running.

But now the modern appliances such

as automatic train-control throughout the entire distance on the New York Central; block signals and rock-ballasted roadbed on both lines, with heavier rails and the general betterment of track and rolling-stock make fast time not only possible but advisable. So before the next general change in schedules it is wholly likely that the faster time will be inaugurated by both roads.

Once, it was only the Century and the Broadway which made the real highball runs, but consistent advertising and press-agenting have brought into being a whole flock of sister ships. On the Pennsylvania, aside from the Broadway the westbound Pennsylvania Limited and the Golden Arrow make Chicago in twenty hours, with the Manhattan Limited and the Red Knight hitting close to this time at twenty hours and fifty minutes. Eastbound, the Broadway, the Golden Arrow and the Fast Mail are the twenty-hour flyers with the Manhattan, the Pennsylvania, the Rainbow and the Gotham limiteds on a time slightly below twenty-one hours.

The New York Central, naturally, would not allow itself to be outdone, and it, too, has built up a fleet of twenty and twenty-one hour hot shots around the Century's glory. There are the Advance Century, Commodore Vanderbilt and Wolverine (using the

THE BROADWAY OFFERS COLOR, LUXURY AND EASE IN ITS OBSERVATION, TO SAY NOTHING OF SERVICE

Michigan Central west of Buffalo) on a twenty-hour time westbound and the Advance Century, the Twentieth Century, the Commodore Vanderbilt, and the Fast Mail, on the New York Central, and the Wolverine, on the Michigan Central on a twenty hour time eastbound. The Iroquois and the Cleveland Limited head up a group of six others which make the run under twenty-one hours. In other words virtually fifty per cent of the railroad's thirty-four New York Chicago trains daily run on a speed of twenty-one hours or better.

Talk about the airplane for fast jumps; give the automobile its due as a producer of pleasure (as well as of street congestion); but hats off to the palatial limiteds as the only creations of man which, with a weight of 1,000 tons and more, can speed onward day and night, in fair weather or foul, at sixty, seventy or even eighty miles per hour, with comfort, safety and assurance to their hundreds of passengers.

Fast Time in Former Days

When one speculates upon the possibility of faster times for the Century

NOTE THE DISTINCTIVE TOUCH IN THE NEW TYPE OF OBSERVATION CARS OPERATED ON THE N. Y. C.

and the Broadway there is precedent for the thought of a schedule better than twenty hours.

As far back as 1905, an eighteen hour time obtained, while in 1910, a run of seventeen hours, fifty-five minutes was scheduled, the two trains having operated on virtually the same schedules, in so far as elapsed time is concerned, and with almost identical hours of departure from both terminals during their twenty-seven years of service.

The last change noted is that which was initiated this year of setting the train forward one hour to conform to daylight saving time, which obtains in both New York and Chicago for the summer months, so that the train thus serves the convenience of travelers on hours which correspond with the times employed in winter months. Even this practice disrupted the schedules on the railroad and it probably will not be followed another year since there are now twenty-hour trains at other convenient hours.

Now about revenue. The Century is a veritable gold mine for the railroad; so much so, in fact, that the New York Central soft-pedals the earning power of this train. Last year it rolled up a revenue of more than $11,000,000, including railway fare, extra fare, and surcharge on Pullman accommodations. It produced more than one-tenth of the total passenger revenues of the railroad and it is increasing rapidly each year.

HARRY PARRY, THE NEW YORK CENTRAL'S PASSENGER TRAFFIC CHIEF, WHO BATTLES FOR MORE REVENUE

Over the New York Central Lines, approximately seventy-five per cent of the total New York-Chicago passenger business is handled, in competition with five other railroads, and of the New York Central's proportion more than half is handled on the Century, which

---

Here is a report prepared by the New York Central Railroad showing the running times of the Twentieth Century Limited since 1902:

	NEW YORK Lv.	CHICAGO Arr	Running Time
Inaugurated June 15, 1902	2.45 pm	9.45 am	20 hrs.
June 18, 1905	3.30 pm	8.30 am	18 hrs.
Dec. 15, 1907	3.30 pm	10.00 am	19½ hrs.
Jan. 19, 1908	3.00 pm	8.30 am	18½ hrs
Apr. 19, 1908	3.30 pm	8.28 am	17 hrs., 58 mins.
Nov. 27, 1910	4.00 pm	8.55 am	17 hrs., 55 mins.
Nov. 24, 1912	2.45 pm	9.45 am	20 hrs.
Apr. 20, 1929	1.45 pm	8.45 am	20 hrs.
Sept. 29, 1929	2.45 pm	9.45 am	20 hrs.

was the highest extra fare train on the road until the several companion trains were established.

Last year, it averaged more than three sections each way daily and touched a high peak in January, 1929, when seven sections moved eastbound and six westbound on the same day, due, in part, to the opening of the New York Automobile Show.

On this banner day of the Century, more than 1,400 passengers were moved east and west, paying the railroad between $60,000 and $70,000 for transportation, and the Pullman Company some $15,000 for sleeping car space.

The greatest number of sections ever operated in one direction was in January, 1928, when eight sections of No 26 eased out of LaSalle St. Station bound for New York, and if the movement of eight trains of eight or more cars each, on a schedule calling for a forty-eight mile an hour average in mid winter, with many other trains on the line, does not call for smart dispatching, then the New York Central wants to know what does.

In the course of a year more than 250,000 passengers use this train one way or the other between New York and Chicago, many of them regular "commuters."

It is seldom that any vehicle which moves by rail, water or sky becomes an "institution," but that is exactly what has been achieved by the Century and Broadway. Every traveler knows them; every railroad man knows them: their names are synonymous with the best and fastest in transportation; they are virtually hotels on wheels, complete in every respect to the rooms, showerbaths, barber, train secretary, telephones at each terminal prior to departure, indeed, every facility of the well-appointed home or club except radio. Neither train provides this attraction despite the success which has

TRAIN SECRETARIES ARE A BIG HELP ON THESE HIGH CLASS VARNISHED SHOTS

attended its inauguration on various other railroads, notably the Canadian National and the Milwaukee

High Average Speeds

Singularly enough, neither of the "standard bearer" trains of either the Central or the Pennsylvania make the fastest average speeds on the road. On the Pennsylvania, the Camden-Atlantic City trains step out at a mile-a-minute pace, although the comparison of this 58-mile run with the 900-mile journey of the Broadway is hardly fair. The Congressional Limited, between Washington and New York, averages 51 miles an hour for the 226-mile run, thus exceeding the Broadway's average of 45.4 miles.

The Century is similarly excelled by other New York Central Lines trains. Where it averages 48 miles per hour for its 960-mile journey, the Knickerbocker Special, eastbound from St. Louis to Cleveland on the Big Four, *en route* to New York, averages 51.4 miles per hour for a 536-mile run and continues on through to New York, a total of 1,156 miles at an average speed of 48.7 miles for the St. Louis-New York journey.

Now here comes a fast one. Speeding across the Ontario landscape, the Wolverine steps across from Bridgeburg, opposite Buffalo, to Windsor, on the east side of the river from Detroit, a distance of 228 miles, in 236 minutes, an average of nearly 58 miles an hour, with a five-minute operating stop at St. Thomas. From this point to Windsor, the average is almost 69 miles per hour for 110 miles. This we submit as the fastest sustained train speed in America, and it is made in Canada, incidentally.

This whole New York Central is, indeed, a speedway. Here in 1893, a run was made at a speed which, for a mile, reached a peak of 112½ miles an hour, by the Empire State Express, pulled by the old "999," with "Charlie" Hogan at the throttle, as described in the old RAILROAD MAN'S MAGAZINE

C. H. MATHEWS, GENERAL PASSENGER TRAFFIC MANAGER OF THE P. R. R., WHO HAS TO GET AFTER THE BUSINESS AND DIRECT THE PASSENGER TRAFFIC STAFF

in 1915. This was between Batavia and Buffalo. On the old Lake Shore & Michigan Southern (now the Line West of the New York Central) a special train sped over the 525 miles between Chicago and Buffalo in seven hours and fifty minutes, at an average speed of 69.7 miles an hour, in 1905.

Nor does this deprecate the Pennsylvania, for few American trains ever have made such a run as recorded by the motion picture special which brought the pictures of Lindbergh's arrival in Washington over the 226 miles to New York in three hours and seven

TELEPHONE SERVICE IN TERMINALS ANOTHER NICE FEATURE OF MODERN DAY LIMITED TRAIN LUXURY

minutes. The train of three cars included one with a dark room for developing the pictures *en route* so that they were shown in Broadway theaters only a few hours after the flyer had been greeted by the throngs in Washington.

Has it ever occurred to you that there is approximately one employee for every three passengers on such trains as the Broadway and the Century? Talk about individualized attention, here it is. At any rate, the Broadway carries a crew, for instance of thirty-one people, as follows: two men on the engine; conductor and two trainmen; baggage master; Pullman conductor; thirteen in dining car crew; club car porter; maid; barber; train secretary; seven sleeping car porters. This is, of course, duplicated by the Century's personnel.

As the number of sections vary with different days of the week and peak seasons of travel, a certain number of cars and engines must be held in reserve to meet the peak demands, for no one who wants to ride the Century or Broadway is ever denied the privilege, providing he has the $32.70 railroad fare, the $9.60 extra fare and the Pullman charge, varying from $7.20 for an upper berth to $31.50 for a drawing room, for the use of which two railway tickets must also be purchased

Yet despite the fact that it costs one approximately $60 to ride these trains, including fares, meals and tips, there is never a lack of business. So, to protect the situation, the New York Central assigns eighty-seven sleeping cars, fifteen observations, twelve club cars, eight diners and twenty-four engines for the several Centuries, a total investment of more than $8,000,000 This compares with the cost of the first train of $115,000, comprising a locomotive, club car, diner, two sleepers and an observation car which carried forty-two passengers.

Now, the several sections of both the Broadway and the Century average eight sleepers each, with club, diner and observation car. Extra sections are added as the demand during the early morning for space may warrant, the practice being to split the train when more than eleven cars would have to operate as one section. Similarly, the sections are shorter in winter. In a year, approximately 2,100 sections of the Century are operated.

Long Distance Business

If the New York Central makes more of its Twentieth Century than the Pennsylvania does of the Broadway it is because the bulk of its passenger travel is long-distance business. Where the Pennsylvania has an every-hour-on-the-hour New York-Philadelphia express, an hourly service to Washington from New York, and numerous other shorter distance runs, the New York

Central relies largely upon its through travel to pile up its passenger revenues of approximately $100,000,000 a year.

While the early morning and late afternoon hours on the Hudson River Division of the New York Central witness a procession of solid-Pullman trains, inbound and outbound, respectively, the New York Division of the Pennsylvania carries, on its four tracks, the heaviest passenger traffic in the world (eliminating suburban traffic) with the speeding New York-Philadelphia, the New York-Washington, the New York-Chicago trains, together with those moving via Washington to the Southland, or to many other diverse points on the Pennsylvania in the east and the mid-west.

The fast trains had their inception during the World's Fair in Chicago, in 1893, when the Exposition Flyers made the run in twenty hours during the summer months, but at the conclusion of the Fair, this schedule was abandoned for nine years. It was not until 1902 that the trains were reinstated. Then began the gradual increase of interest until public demand for faster times became insistent.

The Broadway Limited, for the first ten years of its existence, was termed the Pennsylvania Special, and acquired its present name November 24, 1912, while the Twentieth Century Limited has functioned under that title since its inception June 15, 1902. The Exposition Flyer of 1893 was not wholly a counterpart of the Century and the lapse of nine years before the Century was established removes it from consideration as the "original" Century, other than in scheduled time.

Competition between the New York Central and the Pennsylvania is lively enough, as is the competition between the Lehigh Valley, the Lackawanna, the Erie and the Baltimore and Ohio.

The roads are uniting to a man to give finer service. Employees are banded together to get out and fight for their road. They are getting business. A Milwaukee fireman gets a shipment of wool for his line; a Santa Fe brakeman is responsible for a movement of sheep; a Katy engineer lines up a hunting party for passenger travel.

This all helps. The public has caught, in some measure, the healthy spirit being manifested by railroaders in keeping the wheels turning with new business every day, and the public likes that spirit—likes it well enough to respond nobly.

The passenger business is helping the freight business, and the freight trains are moving faster. The business getters sell time, now, when they talk to shippers, and shippers get time when the shipments begin to move. Passenger advertising, maintenance and operation of hot shots take a large measure of the responsibility for this condition and the railroads are winning through.

The jasper who used to ride the rattletrap bus from Cookville to Hooley's Corners for fifty cents and take an hour for the journey, now pays the railroad sixty-six cents and makes the trip in thirty-eight minutes in a comfortable, clean and easy-riding day coach

Railroads have learned what advertising will do for the extra fare and extra fine jobs, and now they are going to learn that publicity and plugging will help the plug runs just as well.

In the vernacular of the day the traffic men are just beginning to realize what a great racket they've really got in this passenger business. And with realization is coming fruitful activity such as few dreamed of.

"STOP HER!" DAD YELLED. "I GOT SOME PRISONERS TO UNLOAD"

Complete Evidence

Strange Numbers On the Wire at Midnight Solve a Box Car Robbery Mystery

By Rufe Gable

WITH a groan and a squeak and a hiss of air brakes, No. 83, high ball freight, rolled to a stop at the water crane in Loretta City. Dad Gary, the veteran special agent of the R. D. and K. Railroad, swung down from the right side of the engine. Carmichal, the train master of the River Division, swung down from the left side. One on each side of the train, the two men hastened back along the lengthy string of box cars, playing their flash lights suspiciously on the seals and fasteners of each car door.

Nine cars behind the engine, Gary came to an abrupt stop. The car door stood half open. Inside a disheveled load spoke eloquently of the activity of box car robbers. Carmichal's footsteps sounded on the other side. Gary called to him. Carmichal crawled between the cars and uttered a subdued oath as he saw the evidence of pilferage.

"There you are, Dad!" he exclaimed, his voice heavy with disgust; too heavy, it seemed to Gary. "The same cussed performance. The door opened and the car robbed while the train is moving twenty to thirty miles an hour! We've got to nab those devils, Gary. They're ruining us."

Gary's flash light was playing busily over the car.

"Carmichal," he demanded, "how did they manage to break into that car and it moving?"

"How do I know?" retorted Carmichal. "In fact I don't care how they did it. What I want is to catch them devils before they make their getaway with the loot."

"That's a steel underframe car," continued Gary. "No rods to ride; nothing to stand on or nothing to hold to. No man could possibly open that door when the train is moving faster than he can walk."

"What do you mean?" demanded Carmichal angrily. "It's open, ain't it? And it's a cussed cinch that we've got another ten-thousand-dollar claim slapping us in the face. What I want is to catch the devils that done it. Give me a leg, Gary; I'll take a squint inside."

Gary helped Carmichal to swing up into the car door; then he carefully examined the door hasp for signs of tool marks or other evidence of unusual methods used in opening the door. There was nothing. Carmichal made a hasty examination of the lading. The load of merchandise had been shifted from one end of the car to the other by the robbers in their effort to locate the stuff they wanted. As Carmichal dropped down from the door, Gary was returning from the telegraph office with a car seal.

"We'll seal her up and have her set out at Meeker," he remarked. "I want a close check to see what was stolen before the car leaves the division."

"Right," agreed Carmichal. "And now I'll call the section crew and have 'em take us on their motor car back over the line. We'll find where them rascals dumped that stuff out and track 'em down from there"

"A waste of time," Gary vetoed. "They're halfway across the State with the loot by this time."

"Waste of time!" snorted Carmichal. "Well, what do you intend to do? Not turn a hand, as usual? Three robberies on this division within the last sixty days, and not even an arrest. That's a devil of a record, Gary!"

"I'm catching No. 6 back to Medford," replied Gary with no sign of irritation at Carmichal's insulting tone. "I'll see what I can figure out to-morrow."

"See what you can figure out?" roared Carmichal. "Why, damitall, Gary, there ain't anything to figure out. We're robbed; and here you stand like a whistling post and don't turn a hand to catch the thieves."

Gary turned the beam of his flash light abruptly on Carmichal's face.

"I chase common pilferers, Carmichal," he returned with the first show of sharpness in his voice. "But an organized gang like the one that's doing this work has to be outwitted."

"Outwit 'em the devil!" snorted Carmichal, impatiently waving the light aside. "What we need is action."

There was the sudden hissing of air as the brakes on the train were released; the engine bell rang. No. 83 had taken her water and was ready to leave. Carmichal wheeled toward the engine.

"All right, Gary," he called. "If you won't try to catch 'em they're sim-

ply due for another get-away. I'm riding on in to Meeker to see after the checking of this load."

Carmichal disappeared in the darkness. There was the clanging of outraged metal as the powerful engine took up the slack in the train, and the crack merchandise train of the R. D. and K. pulled out of Loretta City.

Dad Gary went to the telegraph office and filed a carefully worded report of the robbery addressed jointly to Webber, the chief operating officer at St. Louis, and to Hargo, the division superintendent at Medford. Then he caught No. 6 back to Medford.

Ordinary methods were not being used in the box car robberies that threatened to demoralize the prosperous business and smooth running organization of the R. D. and K. Railroad. No. 83, pulling regularly from twelve to twenty cars of fast, transcontinental merchandise, was due to arrive in the Medford yard at 11.55 P.M. There the train was delayed for nearly an hour, switching and changing crews and engines. With comparative ease a robber might invade a car while the train stood in the yard; but escaping with the loot would be a most difficult task. And some more perplexing method was being followed.

II.

SINCE the first robbery, which over a month before had netted the robbers ten thousand dollars' worth of lingerie and other light and valuable articles of ladies' ready-to-wear, Gary and his men had watched the train like a mother hen watches her brood. Each night as the train pulled out of the yard, every door fastener and car seal was inspected under the arc lights at Third Street. One or more special agents, which is the railroad name for detective, rode the train over the entire division, patrolling the train like marines on sentry duty. But despite these precautions the trick had been turned twice more—No. 83 was robbed right under the noses of the special agents.

Then railroad officialdom tore its hair. In his St. Louis office Chief Operating Officer Webber threw half burned cigars savagely into the waste basket, exhausted the expletives of the English language, and dictated letters that brought a deep crimson color to the face of every one of his subordinate officials on the River Division. And the substance of those letters was a demand for the immediate and perpetual ceasing of the robberies, together with the capture of the guilty persons.

There was just reason for concern. The loss of the merchandise, which the road must pay for, was no little figure. And the loss of confidence of the shipping public was even more serious. The hauling of the fast, transcontinental merchandise was the best paying business the R. D. and K. pulled over her rails. A tireless soliciting agent had been a year landing the contract to handle it as intermediate carrier between the originating lines on the east and the Pacific Short Line on the west; and the prospective loss of this business because of the repeated robberies on the River Division, was a growing nightmare to R. D. and K. officials

But while his superiors were helplessly raving, and Hargo was urging coöperation, and Carmichal was demanding action, Dad Gary went diligently about the business of catching the robbers. You would not have suspected Gary of being an officer of the law. His lean face wore the indelible trace of a smile in the lines that ran obliquely downward from the bridge of his nose. His gray eyes were round

and almost boyish in their frankness. You might have guessed correctly that he never appeared to hurry; that if he worried he never showed it, and that he never would become excited. You would have described him in your mental notebook as an orderly man; but never would you have associated him with law enforcement.

Gary was at a loss to know how the robbers accomplished the apparently impossible task of breaking into a box car through the side door while the train was running. But he had his own methods of arriving at conclusions; and never before had any superior official questioned his ability to handle the most baffling case. But these recent robberies were of too far-reaching effect to be passed lightly; they reached the very vitals of the system, and threatened to demoralize the most lucrative business on the line. Certain poignant facts were apparent to Gary from the first. The robberies were committed by a well-organized gang of experienced crooks who were getting information from inside sources about the movement of valuable shipments. And they were taking only lingerie, silk hose, and similar articles of unidentifiable and highly negotiable character—articles that need only be removed from the original container to lose their identity completely.

The clock in Gary's office pointed to four when he reached there. A few hours sleep after a strenuous night would seem desirable; but Gary produced his black cob pipe from a drawer of his desk, and with it working valiantly, he perched his feet high upon his office desk, leaned far back in his chair, and thus for two hours he sat, giving no clew to the working of his mind.

At length he arose, put on his hat, and went down to breakfast and a shave. There was a sheaf of telegrams on his desk when he returned to the office an hour later. Gary ran through them methodically, and with a stub pencil jotted instructions on the face of each one for the direction of his clerk. One telegram he laid aside by itself and read a second time. It was from Webber, and its brevity was emphatic. "I expect you to catch the robbers." Gary's wire report from Loretta City had brought prompt action from the chief.

Gary left this terse bit of information on his desk and walked briskly across the hall into Hargo's private office. Hargo was pacing the floor, his hair rumpled, his face drawn, giving every indication of being in a state of high agitation. A pretty, brown-haired girl sat at Hargo's desk with pencil and tab ready for the superintendent's dictation when he should give it. Both Hargo and the girl looked up quickly at Gary's entrance. There were traces of recent tears in the girl's lovely brown eyes. She tried to smile at Gary, but hardly succeeded. She arose quickly and seized Gary's arm.

"Daddy," she declared, "I—I just can't believe it. "Something is surely bound to happen—before it's too late."

Gary looked in surprise from his daughter to Hargo, and then his eyes fell on the two telegrams lying on the table. One of them was a copy of the one Gary had received. The other he picked up and read. It, too, was from Webber.

"Wilson relieves Gary as chief special agent Thursday morning. In the meantime use every means possible to get No. 83 over your division intact."

Gary read it slowly, as though searching for some hidden significance in those words. It is no discredit to

his courage that his hand trembled ever so slightly as he laid the telegram back on the desk. He was fired! After nearly a lifetime of faithful service for the road, he was discharged for incompetency. To a man who had lived with and for his job, as Gary had, there could be few blows more staggering. His voice was husky but steady when he spoke.

"All right. It's all right, Hargo. I've failed—so far. But all I need is more time, just a little more time."

"But, my Lord, Gary, what are we to do?" Hargo demanded tensely. "We're all torn to pieces. Everybody is watching this division. The boss is raving; we're going to lose that westbound contract, and that means money. And now you're fired! That won't help matters; it 'll make 'em worse, for you are doing more than any new man can expect to do. But we're all under suspicion. By Heavens, Gary, I never heard of such a thing! Robbery after robbery right under our noses, and they're getting by with it. Heavens, man, can't we do something?"

"Sit down, Hargo," commanded Gary. Hargo started. Gary repeated the words. Hargo complied, probably without considering why.

"My Lord, Gary, you—you don't seem to worry!" he gasped.

"Hargo," said Gary slowly, "worry never helped anything. When a man starts to worrying he loses his grip. For the next twenty-four hours I shall still be chief special agent; and the company is paying me to work, not to worry. And for your peace of mind, I want to say that I am almost ready to lay hands on these robbers. I don't know whether I can do it within the next twenty-four hours or not; but I'm going to do everything humanly possible. I don't want to leave the service with such conditions hanging over my department."

III.

GARY had just returned to his office when Joe Holeman, third trick operator in the Medford yard office, came bursting in like a Kansas tornado.

"Hello, Joe," Gary greeted. "Was just going to send for you. What's on your mind?"

"Several things," Joe replied with an acute shortness of breath that testified of his hurry. "Been looking all over for you. Ever have any trouble with Carmichal, Dad?"

"Not exactly. Why?"

"He's framing you with Webber."

"Let's have it, boy."

"He sent Webber a wire from Meeker this morning; I heard it go over the wire. He made it strong, Dad. Said you're not trying to nab these robbers, and that you refused to even make a move to catch those fellows last night."

Gary's eyes narrowed.

"That explains part of it," he remarked.

"Part of what?"

"Webber's sudden decision to discharge me."

"Dad, he didn't—"

"Wilson takes charge in the morning."

"But that's dirty work, Dad. Carmichal ain't giving you a chance."

"On the contrary, Joe, he's helping. He's showing me that I'm on the right track. All along Carmichal has insisted that I spend my time chasing those robbers after they make a haul—an impossible task in these days of swift transportation and ingenious fences. And he's urged that I try to trace the stolen goods, another impossible task when even the manufacturer could not

identify the product of his own mill after it is out of the container and swear to it. These crooks, Joe, are dealing exclusively in expensive flimsies that can't be traced because you cannot positively identify a single article of them. And Carmichal knows that. If I should spend my time as he suggests there would be little danger in the pilfering business. But since I'm working to nab the rascals at the business of box car robbing, Carmichal's getting worried."

"You mean Carmichal's a member of that gang?" Joe gasped.

"The brains of it, Joe."

"Whew! By heck, I hope you clamp it on him, Dad. The tighter the better. Can you do it, Dad; in the twenty-four hours you've got left?"

"We match wits to-night, Joe. For I figure there'll be another robbery on No. 83 this very night."

"But not to-night! They wouldn't try turning the trick two nights in succession."

"What better time? With me facing discharge I have good reason to appear to desert the job. Carmichal will think he has an open field. And they got a water haul last night. I acted on a hunch, Joe, and it worked. This bunch has had some way of finding out what cars carry the high-grade ready-to-wear from the eastern factories. It was very little trouble for me to determine that some telegrapher is passing out copies of the code message that my office gets every day, informing us what cars to look out for."

"Echols, third trick at the relay office," declared Joe excitedly.

"You've laid your finger on him," replied Gary. "I have no time to inquire how you did it. But I happen to know he's the one who receives these code messages—they come in on his trick about 4 A.M. And if I'm right about Carmichal, then it logically follows that Echols is furnishing the tips. They're in code, of course; but all the officials, including Carmichal, have the code book. Yesterday I had Bates, my man in St. Louis, send me a decoy message showing some of this merchandise in a certain car in No. 83. The fact that the robbers broke into that car proved my theory to be correct. They are getting their tip from those messages. And Carmichal is the man that is directing the work."

"What makes you think they'll raid 'em again to-night?"

"Because there are six cars of high-class stuff on No. 83 to-day. The fact that they failed last night will only be an incentive to try again. I've got a notion that one or more of those cars will be robbed between Medford and Meeker to-night."

"But how are you going to know which car it 'll be?"

"That's a thing I wanted to talk with you about, Joe. How many employees are there around the yard office after midnight?"

"The night yard master, the bill clerk, the caller, and myself."

"This bill clerk, Gorgan, isn't it? What are his duties?"

"He keeps a record of cars moving in and out of the yards, handles the waybills, and makes himself generally useful."

"He has a supply of car seals, doesn't he?"

"Yes. It's his business to seal any car that comes into the yard not properly sealed."

"I see, I see; a right handy man, Joe. And say, do you ever notice anybody else hanging around the yard office nights?"

"Do I? Why, there's two extra

brakemen, Jim Black and Mart Hadley, that I have to kick out of the way every time I go on duty. Always loafing around the yard office playing cards, except when they're on a run, which ain't often, as they're new men on the extra board. But don't figure them in clique with Carmichal, Dad. They claim Carmichal crooked 'em out of regular runs. When they ain't playing cards they're cussing Carmichal."

"Thanks, Joe. I'll remember that."

"Anything I can do to help, Dad?"

"Not a thing. Thanks. I'm still in the dark about their method of getting into the cars; but it 'll be simple enough when we see it. Good morning, Joe."

Joe arose to leave, and then suddenly turned back.

"Say, Dad, there's one other little thing. Maybe it amounts to nothing; but it's peculiar—especially since you think Carmichal's in with the robbery gang."

"I'm listening, boy."

"You know, Dad, that between 1 A.M. and 7 A.M. the telegraph wires get pretty quiet, and a fellow's apt to catch any bits of conversation going over. Well, three or four times lately, about one o'clock, somebody has come in on wire No. 2 and made a number. Maybe it's a '3' or a '7' or a '9.' After making the number once he closes his key. In a minute somebody else repeats that number. You know a telegrapher can distinguish one operator's sending just as readily as you can identify handwriting that you are familiar with. Something about the way a man makes the characters. And that number is made first by Carmichal; and it's repeated by Dick Riley at Cardell. I'll swear it."

Gary studied the youth a moment, his fingers beating a soft tattoo on the desk.

"About 1 A.M., you say, Joe. Carmichal sends it and Riley, at Cardell, repeats. Where could Carmichal be sending that stuff from?"

"From his office, likely. The wire is cut in there."

"When was the last time you heard these signals?"

"Last night."

"What number was used?"

"Nine."

"Do you remember any of the other numbers, and the dates you heard 'em?"

"Not the dates. But as to the numbers, once it was a five, another time I believe a seven."

Gary invaded a filing case from which he drew three bulky files. These he spread upon the table, examined to his evident satisfaction, then returned them to the case.

"Five and seven are correct, Joe," he said. "The other time it was a twelve."

"What does it mean, Dad?"

"That number is the key to the successful turning of the trick, if I've got it right, and I think I have. Just a minute; let me study this out."

Gary leaned back in his chair, and for twenty minutes sat with eyes closed and fingers locked behind his head.

"Yes, I've got it," he said, sitting upright at length. "Carmichal gives the tip-off by means of that signal; Riley repeats it to signify he's caught it. It can be worked that way. Tonight, Joe, I'm going to bank everything on that signal; and I want you to help me."

"Tickled to death, Dad."

"All right. Watch for that signal with your life. And as soon as you get it, phone me a message to Cedar Heights, giving me the number. Tell the operator I'll be on the engine of

No. 83, and for him to hand that message up to me. Use the phone instead of the telegraph, for Riley might hear you on the wire and get next."

"All right, Dad. You can depend on me. I don't know what it's all about; but I'm sure hoping it puts the clamps on that sneaking Carmichal."

"Joe! Do you suppose?"

"Oh, Dad would get 'em all right if they'd give him time; but with only one night left there ain't time for any slips. And it seems that he's doubtful about ringing Carmichal in on the deal."

Then Joe proceeded to tell Ruth

THE INSTRUMENT CLICKED OUT ITS MYSTERIOUS CODE

"I'm afraid, Joe, that circumstantial evidence is all we'll have against Carmichal even if I nab his gang. Of course they'll likely squeal; but it would be a great satisfaction to me to catch him outright."

IV

At lunch hour Joe met Ruth Gary as she came from Hargo's office.

"Dad's got a line on the gang," he assured her enthusiastically. "He thinks he'll nab 'em to-night."

about the puzzling signals, and how Dad Gary expected to use them to clear up the mystery of the robber gang's methods.

For a moment Ruth was pensively silent.

"Joe, would proving that Carmichal sent those signals be sufficient evidence to convict him?"

"It certainly would if those signals are as important as Dad thinks."

"Then, Joe, you possibly can help by jotting down the time you hear the

signal. For instance, if we could prove that Carmichal was in his office at that time it would be more evidence against him."

"A great idea!" declared Joe. "I'll do that."

The clock in the telegraph office pointed to midnight when a lithe, inconspicuous figure sped noiselessly down the hall of the division offices, inserted a key into the door of Hargo's office, and entered. Carmichal's office adjoined this. A door which was no longer used and was now blocked with filing cases stood in the wall between the offices. Above the door was a plain glass transom. The girl crawled upon the filing cases and peered through the transom. Satisfied with the arrangement, she crawled down and waited.

At length hurrying footsteps approached Carmichal's door, a key sounded in the lock, and then a light gleamed through the transom. Softly mounting the filing cases, Ruth Gary watched Carmichal sit down to the table across the room and open a telegraph key. The instrument clicked out its mysterious characters, and beneath the shadow of his hand the girl could see the spark of the broken current in the key. The clock on the opposite wall of Carmichal's office pointed to twelve thirty-six.

At the same moment Joe Holeman, in the yard office, suddenly became stimulated to great activity. The telegraph instrument he was watching suddenly made three short, sharp clicks, the numeral "5." In a moment the numeral was repeated. Joe jerked down his telephone receiver and called Cedar Heights as Gary had instructed.

V

THE train order board at the Cedar Heights station informed the crew on No. 83 that the operator held orders for them. The head brakeman crawled down on the steps of the engine and caught the hoop with which the operator handed him the orders. The engineer read the orders carefully, then glanced at the message written on yellow paper which had been folded with the orders.

"Hey, Gary," he called, turning around in his seat. "Here's a message for you."

Gary read it hastily.

"O'Herin," he said, "I want you to stop at Cameo."

"Stop!" snorted the engineer, whirling back from his throttle. "W'at ye think Oi'm a runnin', a cockeyed local? What ye wanta stop at Cameo fer?"

"I want to switch your train," replied Gary. "I want to reverse positions of the fifth and sixth cars behind the engine."

"W'at in th' all-fired creation ye meanin' by that?" O'Herin shouted angrily. "Ain't the train made up to suit ye, hey? Think Oi'll be delayed with sich tomfoolery like that? No, I wouldn't stop this train fer old Webber hisself without orders to do it."

O'Herin's sensibilities were still tender from the criticism he had received for delaying No. 83 on the previous run for four minutes with a hot pin.

"You'll stop her for me," replied Gary positively. "I've got a bunch of those box car thieves back there in that fifth car, and I've got to shift positions with those cars in order to hold 'em and nip their little scheme."

"Thim robbers, ye say, Gary?" gasped O'Herin. "Why, shore Oi'll stop if ye've got 'em. Switch ivery car from tender to caboose if ye need. Oi don't see no use o' it; but it's all right with me. Oi'll likely git thirty days

suspension; but I'd take twice that to nab thim divils."

Cameo, a mere siding for the passing of trains, was a fifteen minute run from Cedar Heights. Gary explained to the brakeman just how he wanted the switching done. At Cameo O'Herin brought hot shot to a stop that still stands as a lasting tribute to the efficacy of air brakes. Then throwing the big engine about with a violence that sprayed great showers of sparks from beneath the spinning drivers, he made the two necessary switches in five minutes.

"Oi'll take her in on time yit," he shouted to Gary as the throbbing engine again started the heavy train.

No. 83 always took water at the Cardell tank. When O'Herin brought his engine to a groaning stop under the waterspout, Gary hurried back and carefully tested the seals on the doors of the fifth and sixth cars behind the engine. They were intact. Gary climbed to the top of the fifth car, lay on the roof flat on his stomach, peering over the edge. Gary expected something to happen.

With a tremendous jerk that took the slack out of the eighty-car train, O'Herin started the two-thousand-ton load up the grade. The Cardell station was a quarter of a mile beyond the tank, and it was a stiff grade all the way. Riley, the operator, stood on the station platform, lantern in hand. He bobbed his lantern in greeting to O'Herin; but the minute the engine was past him, he set the lantern down and darted out of the circle of light that it gave. Thirty seconds later Gary saw a flash light gleam an instant on the car door beneath him, a knife blade flashed against the Tyden seal, and even above the roar of the train Gary could distinguish the metallic ring of the door clasp falling against the steel frame as it was thrown open. A few seconds later Gary had climbed to the ground and was following Riley back to the waiting lantern.

"Hello, Riley!" he called above the roar of the train.

Riley whirled in alarm and seemed on the verge of running.

"H-hello, Dad!" he gasped. "Good gosh, you nearly scared the sock off me."

"Didn't mean to," replied Gary. "I'm just riding the train. Just wanted to ask you to let me know at Loretta City if you see any bums riding."

"Sure," agreed Riley, obviously relieved. "You're mighty right; I'll let you know, Dad."

Gary climbed high and went over the top of the train to the engine.

"Stop at Loretta City," he called to O'Herin. "I've got some prisoners in the sixth car back I want to unload."

The brakeman went back to the sixth car with Gary. Side by side they lay on their stomachs and watched the door beneath them by the gleam of Gary's flash light. In a few minutes the bit of an auger burst through the door.

"Well, I'll be durned!" gasped the brakeman.

"It's working fine," ejaculated Gary with ringing satisfaction in his tone. "That message I got back at Cedar Heights tipped me off what car these birds were in—the fifth car behind the engine. I knew they had to have help of some kind in getting out; and by switching the cars I found out where that help comes from, besides keeping the rascals locked up in the car. Riley, at Cardell, cut the seal and unfastened the hasp on the fifth car. If we hadn't spoiled their arrangement all those scoundrels needed to do was to pry

the door open from the inside, dump their loot, and jump out on the first grade that slows us down. Then they load their stolen goods into a waiting truck and are gone out of all reach in a few minutes. You see, they were prepared to cut their way out of the car if their confederate failed to release them, as he did this time."

A small handsaw, operated from inside the car, was busy cutting a circle around the door hasp when O'Herin stopped the car under the platform lights at Loretta City. Gary cut the car seal with his pocket knife and loosened the door hasp. The brakeman grasped his arm.

"You ain't goin' to open that door and tackle them guys single handed?" he gasped.

"They'll be meek as lambs, knowing they're trapped and supposing there's a whole regiment of dicks out here to greet 'em," replied Gary. "I've got help coming; but I don't know when they'll be here, and I've delayed this train enough for one night. Shove the door open, fellow."

Gary, with automatic drawn, turned his flash light into the car. The brakeman backed away out of the line of possible bullets, and O'Herin and the fireman stood watching from a distant corner of the station platform.

"Come on out, boys," Gary called in authoritative tones. "We've got you."

There was the shuffle of moving bodies and two figures crawled over the disheveled contents of the car and leaped to the ground, hands upward. Gary snapped handcuffs on them.

"Why, spin me drivers if it ain't Jim Black and Mart Hadley!" gasped O'Herin, who had approached with the passing of danger. "Oi thought they was both pets o' Carmichal's."

"They are," replied Gary significantly.

A motor car buzzed up the street from the west and stopped at the platform with a loud squealing of brakes. Sharp, Gary's right-hand man, leaped from the car.

"Good work, Dad," he exclaimed, his quick eye taking in the scene at a glance. "But you didn't have all the luck. We got the goods these birds unloaded two miles north of Cardell, loaded it in the truck that was waiting there for it, and sent truck, goods, driver and all back to town with Shultz in charge. It all worked out just like you had it figgered, Dad."

Gary himself went to Carmichal's office and arrested him early the following morning. That official was loud and threatening in his protestations of innocence.

"And that," Gary remarked to Superintendent Hargo as Sharp led the raging man down the hall, "is more evidence of his guilt. I'm glad I got to lay the nippers on him before Wilson takes my job over."

"Wilson isn't taking it," returned Hargo. "Your wire report to Webber about the capture of these men brought a rush reply instructing me to keep you on the job."

Hargo ushered the old man into his office. There they found Ruth and Joe Holeman doing buck and wing wonders in expression of their jubilation. Ruth covered her father with kisses, and Joe proudly pumped his hand.

"But how did you ever determine that those thieves were riding in sealed cars?" asked Hargo after order had been restored.

"That was apparent from the first," replied Gary. "What stumped me was their method of getting out of the cars.

Joe hearing those numbers on the wire started us on the right track. The rascals had quite a complete little organization which Carmichal had worked up. Echols, third trick operator in the relay office, was slipping Carmichal copies of those code messages that came to me warning me to watch certain cars of valuable merchandise. Carmichal lined up Black and Hadley to do the actual pilfering. Grogan, the yard clerk, smuggled the two rascals into the car while the train stood in the yard and sealed the car door after them. I have the seal he used last night; it's the same series he's using now, and fixed his guilt beyond question. All of them being employees, their presence in the yard excited no suspicion if any of my men saw them. Then, after the train was made up, Carmichal notified Riley, at Cardell, where the car that was being robbed stood in the train. The number flashed over the wire told him that. Riley cut the seal and dropped the door hasp as the train pulled away from the water tank. The gents inside opened the door, dumped their goods, and jumped on some slow grade where the truck driver was stationed to pick them up. It was a profitable arrangement while it lasted."

"A tight case all the way around—unless we except Carmichal. Unless somebody squeals we can't prove that he sent those signals," said Hargo.

"Which shows that you haven't seen all the evidence," inserted Ruth in tones mysterious. From the back of her notebook she drew a small kodak picture and laid it on the table.

"The setting is Carmichal's office," she explained unnecessarily but effectively. "There we have Carmichal posing at his desk with his hand on the telegraph key at 12.36 A.M., as shown by the clock on the opposite wall. It was twelve thirty-six when Joe heard the signal. He made a note of it."

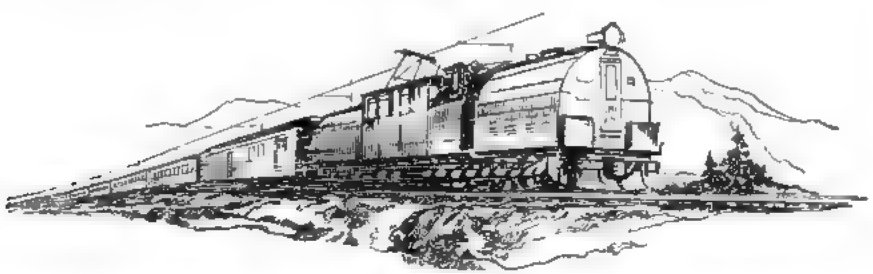
"But," protested Gary, who was first to grasp the significance of her revelation, "that clock doesn't prove a thing. It might be twelve thirty-six noon."

"Not in that setting," replied Ruth. "Notice that the window shades are up, and that the light is coming from the electric lamp while it's dark outside."

Hargo slapped Gary on the shoulder.

"She's a chip off the old block, Gary. It's a tight case all the way around. There's going to be a general shakeup when I fill Carmichal's vacancy. Mr. Joe Holeman goes on as third trick dispatcher to-morrow night. And I know a certain young lady who gets a raise in salary to-day because of meritorious service."

"Daughter," instructed Gary with characteristic directness slipping the cogs of machinery back into gear, "write this telegram for me: 'To C. A. Webber, St. Louis: The robberies have ceased.' Sign it Gary."



"SNAKES"

By Bob Crabb

I'VE traveled East, I've traveled West
From Philly to Santa Fe,
From Canadian scenes to New Orleans
And out to Frisco Bay.

From San Antone to Cairo,
From Cincy to Albuquerque,
I've ridden the trails of the singing rails,
A boomer looking for work.

The lumber jacks are a hard-boiled crew,
And stevedores are tough,
As hard as rocks, along the docks,
They brawl and do their stuff.

Shacks are not so meek and mild,
They've got the sand it takes.
But I've got a hunch that the hardest bunch
Are these wild birds, the Snakes.

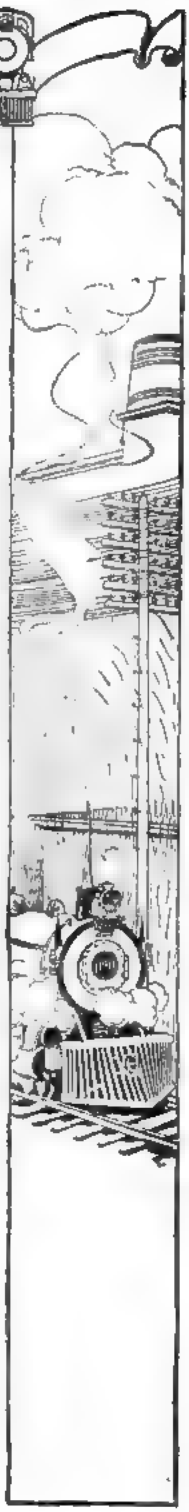
A Snake, old dear, is a switchman,
He fears neither devil nor man;
He thinks that rules were made for fools,
But he does the best he can.

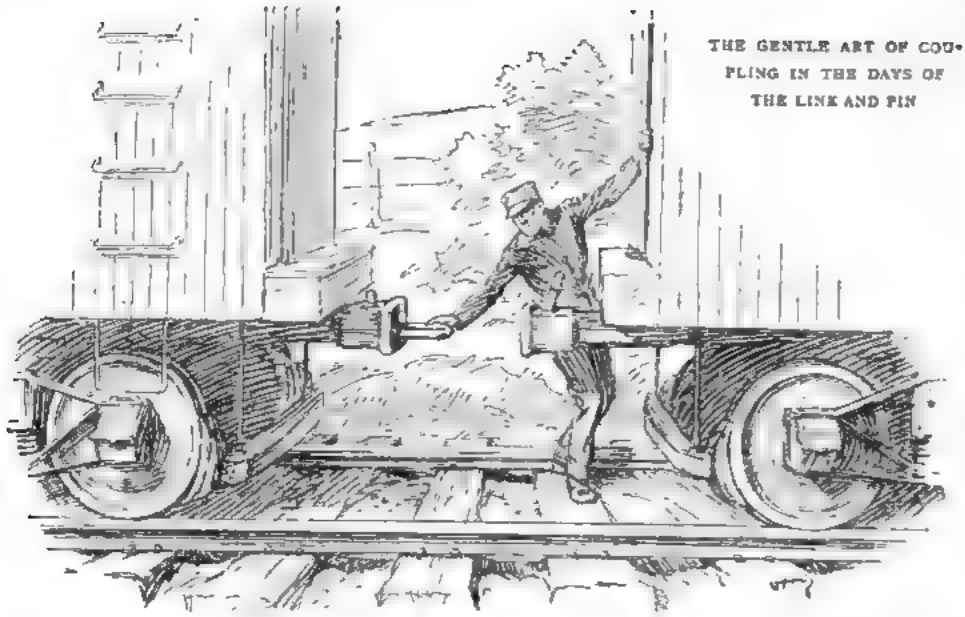
He does his work in the Garden,
Under the Ringmaster's frowns.
His engine's a Goat, and I'll have you note,
His helpers all are Clowns.

His language may be untidy,
Lord! How the guy can cuss!
Now, you be the judge, he does not say fudge!
But, I guess a parson would fuss.

He swears by the moon and the sun,
And damns by the shining stars.
Why, brothers and sisters, his language blisters
The paint from the red box cars.

The long freight pulls into the yards,
The Goat goes against the train.
In a couple of shakes, the rollicking Snakes
Have busted the drag in twain.





THE GENTLE ART OF COUPLING IN THE DAYS OF THE LINK AND PIN

Coupling Up

From the Link and Pin to the Janney Was a Long and Bitter Struggle in Railroading

By Charles Frederick Carter

TRAVELERS on the Chicago-California line of the Atchison, Topeka & Santa Fe Railway may see on lawns at stations at which passengers are unloaded to feed and rest a post surmounted by one of the many link and pin couplers in universal use on freight cars in the not-so-good old days. Beneath each coupler is a sign bearing these words:

LEST WE FORGET

Just why the Santa Fe is trying so hard to remember that which others are pretending they never heard of is not to mourn the link and pin coupler, but to call attention to an interesting story concerning a phase of railroad history; though, when it comes to that, any one who can mention a phase of railroad history which is not interesting deserves a medal, or something. Anyway, the Santa Fe does not display nearly all the brands, makes or varieties of link and pin couplers. It hasn't stations enough for that.

You see, America's principal industry in the latter half of the nineteenth and earlier years of the twentieth centuries was inventing car couplers. At least it would seem so, for records show that 11,813 patents on car couplers have been issued up to the

hour of going to press. To make it more interesting the railroads tried as many of them as they could. When the railroads were young and ingenuous they each hired a master car builder and turned him loose to see what he could do. The whole subject was new and, naturally enough, each man wanted to contribute something to the progress of the art of car building. But they had not yet learned the value of coöperation. To judge by results produced, it would seem as if each master car builder considered his life a failure if he produced a car in any way resembling the car built by any other railroad.

Why, the difference in height of cars was so great that until near the close of the nineteenth century the sky line of the average freight train looked like the profile of a transcontinental railroad. Variation in all other details, including couplers, was as great.

In the latter detail the master car builders were ably assisted by inventors who, in order to obtain the coveted patent, had to produce something different from other couplers, and they did it. The rest was easy; for the railroads were always ready to try anything once. Results, as worked out in practice by trainmen, were something like this:

Lugging the Links

Suppose you were on way freight, which means that you had to do all the switching at stations along the road. Suppose you arrive at Dismalburg not more than three or four hours late to find that the station agent had a car to go—anywhere beyond the next division terminal. Therefore, you wanted to get that car in the train behind all cars that were to be set out along your run. You cut off behind a long string of cars and pulled down below the switch, which was easy because it was down hill. But backing that string of cars up hill on a day just foggy enough to make the rail nice and greasy, was not so easy; especially when the little old eight wheeled engine has no way of using sand behind the drivers. However, in the course of human events, you get in on the siding. Then you coupled on to your car and went?

No, it wasn't quite so easy as that. In the first place the car you wanted was behind four others. Not only were they all uncoupled, but all the links and pins had disappeared, because the last train crew that passed through Dismalburg ahead of you had robbed all the cars on the siding of links and pins for their own use. That was standard practice. Besides, you did not know whether the couplers on the last car backing down and the first car on the siding were near enough to the same height from top of rail to center of draw head to make possible a coupling with a straight link. Difference in height of drawbars varied as much as five to eight inches. Deciding after careful reconnaissance that a straight link would do, you held up one finger which your partner understood as a signal that you wanted a round pin. Next, holding up two fingers side by side indicated that you also wanted a flat pin. Third, you spread out all the fingers of both hands then curved them over and raising both hands alternately brought the tips of fingers on both hands together and separated them a foot or so as an indication that you likewise desired a link.

Remember that I am speaking of days when freight trains were few

and short, like the prayers said at the burial of Sir John Moore. Of course such feeble signals could not be seen a fraction of the distance along a modern freight. In these days when the gentlemen at the rear of a freight train want to communicate with the front-end they write the engineer a postal card.

Having received in the sign language a list of his partner's wants the head brakeman would proceed to mine in the wet cinders at the back of the tank.

If the mining was good he eventually discovered the articles required which he carried back to the point at which the coupling was to be made. Trial proved that the round pin was too big to fit the hole in the coupler; that the flat pin was also a misfit and that, after all, the difference in height of the two couplers was so great that a straight link would not answer.

This necessitated a trip to the caboose which had to be stripped of all the coupling paraphernalia it possessed before the cars on the siding could be coupled up and the one you wanted set into the train. When your work was done at last and you were ready to go you carefully gathered up all the links and pins you had used in switching because you felt pretty sure you would need them at the next stop. The next crew that came along could look out for itself, just as you had done.

While link-and-pin couplers were a common feature of all freight cars until the nineties, variation in every detail was great. There was no uniformity in height, width or depth of the pocket at the end of the drawbar to receive the link, in the position, size or shape of the pin hole, in the size and length of the drawbar or means of securing it to the car. The height of the drawbar above the rail varied so much that crooked links frequently had to be used.

Theft of links and pins from cars standing on sidings was so common and so provocative of delays that some inspired genius hit upon the idea of fastening pins to their drawbars so they could not be removed. This was worse than loose pins. A man would pull a pin to cut off a car in switching, then step out to signal the engineer to "give 'em a kick." At the first jar the pin would drop back again, which would necessitate the man going between the cars to pull it a second time and perhaps a third or fourth, or running along between the cars holding the pin up until the cut off cars had been given sufficient momentum to run where they were wanted to go. In such cases there was always danger of catching a foot in a frog or a guard rail, or stumbling over the ties on a partly ballasted siding, with disastrous results.

On one of the Granger roads I knew a brakeman named "Aleck" who was fussing with a pin that would not stay pulled when he stumbled over a tie in an unballasted siding and fell alongside the rail so that the wheels cut off his coat tail. As that coat never did have any tail worth bragging about you may guess that Aleck had a more or less close call. At least, Aleck thought so.

Gathering up the severed coat tail he held it gingerly in both open palms, walked to the station where the conductor was appealing to the dispatcher for help against Number One, laid the bit of cloth upon the counter and then laying his switch key upon it he expressed his opinion of railroads in a few well chosen words, after which he handed in his resignation to take

effect forthwith. Then he went to the caboose and lay down on a locker to calm his nerves.

By the time the train reached the next station Aleck was himself again. He called for his switch key and resumed his work as usual and in due time was promoted, eventually attaining the command of a passenger train, which is supposed to be the ambition of all well regulated trainmen. He had that coat tail framed and hung in his bedroom as a perpetual reminder to take no more chances.

Another feature of the pin fastened to the drawbar was that when leaned back against the deadwood it formed an ideal trap for unwary fingers trying to push it into place as cars came together in coupling. I found that out myself.

When interchange of cars between railroads grew in importance, the intolerable delays due to lack of uniformity in equipment called the attention of mechanical men whose duty it was to care for cars, to the need of an association through which to coöperate in abating some of the worst nuisances, at least. This was the direct cause which led to the organization of the Master Car Builders Association in 1867.

First Step to Standardize

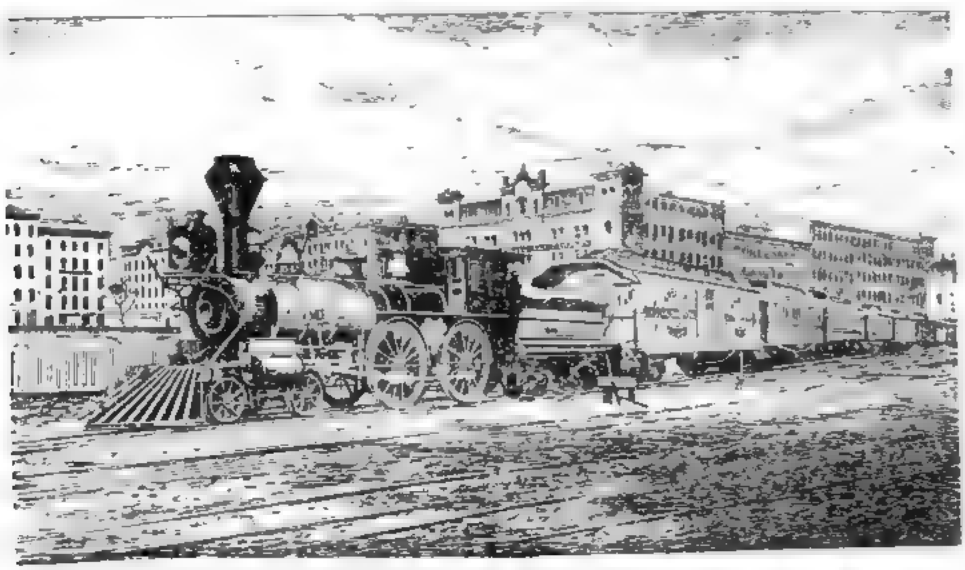
THE first step toward standardization was to fix the height from the top of the rail to the center line of the drawbar at thirty-three inches, but allowing a variation of three inches between loaded and empty cars. Events proved that fixing a standard height and securing compliance therewith were two different things. Use of crooked links, which were not only a source of danger and delay but subjected the ends of cars to severe vertical strains, had to be continued for years.

But the things mentioned in the foregoing were only lesser evils. Reporting to the Master Car Builders Association in 1879, the Committee on Accidents to Trainmen commented at length on deadwoods, or buffers on each side of the coupler to protect its springs from too severe compression shocks. The committee measured deadwoods on cars from five different railroads. It found the distance between blocks in one instance twenty-eight inches; in another, twenty-five and one-half inches, and in the other three, seventeen, twelve and one-half and eleven and one-half inches respectively. Said the committee:

"It can easily be seen that unless two cars come together whose blocks are a uniform distance apart, they are of no value in saving the springs, for which purpose they are intended. Imagine the jeopardy in which a man is placed who goes between two cars to make a coupling when on one car are blocks twenty-eight inches between and on the other car only eleven and a half inches. And then some of these deadwoods are fifteen inches up and down and seventeen inches between. How is a man to make a coupling with such barriers placed before him, unless at the risk of his limbs? There are but few railroad companies now which use double deadwoods; but when two such cars come together they are pretty sure to do injury to limb."

To mitigate some of the perils of coupling cars with links and pins, not to mention deadwoods, some railroads tried the expedient of issuing coupling sticks to train and yard men to be used for guiding the link so that the hands might be kept out of danger. They

were cute little paddles with nicely turned handles, flat sides and a notch right where the link ought to be held. There was a black leather belt and a sheath in which to carry the stick. They were faithfully used—when word passed along the line that the superintendent was coming.



THIS TRAIN, VINTAGE OF 1873, IS EQUIPPED WITH MILLER SAFETY PLATFORMS AND COUPLERS. YOU CAN'T SEE THEM, BUT YOU CAN SEE THE KIND OF EQUIPMENT THAT WORE SUCH THINGS

At all other times they were carefully laid away so they would not become weather stained. You see, railroad men of those days considered it a reflection upon their ability to ask them to use coupling sticks, and so that expedient was a flat failure.

So things went on in the same old way.

In its report for 1890 the Interstate Commerce Commission declared that the most common accidents on railroads were those occurring in coupling and uncoupling cars, no less than one-third of the total being attributed to these causes.

This fact is what the Santa Fe is afraid we may forget. It is essential to a proper understanding of what follows. These accidents to trainmen are the foundation upon which rests the romance of the coupler.

But why in the world, you ask, didn't the railroads adopt automatic couplers and so do away with all these accidents and delays and damage to equipment and all the rest of it? Sure enough, why didn't they?

Then Came the Automatics

THE answer is that they did introduce automatic couplers—introduced them copiously. Why, in 1890 there were no fewer than forty-five different varieties of automatic couplers in use on freight equipment, not counting two other and quite different varieties in use on passenger equipment. Since variety is said to be the spice of life, the inventors of these forty-five different kinds of couplers had seen to it that no two of the 115,319 freight cars then the proud possessors of these improvements

would couple together if they happened to be equipped with different kinds of automatic couplers. Often they would not couple with their own kind except after repeated urging. In order to get the story of the automatic coupler in proper order suppose we go back to the beginning and start afresh.

As early as 1848 A. G. Heckrotte patented what he thought was an automatic coupler. As no one else thought so, Heckrotte's patent serves no other purpose than to mark the first feeble beginning of the flood of patents for such devices. D. A. Hopkins of Elmira, New York, in 1856 patented an automatic car coupler which was given a trial on the Erie Railroad. Hopkins's coupler consisted of a small piece supporting the pin until the link entered the drawbar. The pin was to be placed in position by hand resting with the lower end supported by the spring piece. As the cars struck the link, previously placed in the drawhead of the other car, they thrust back the spring piece, allowing the pin to drop in place. This was the first of a long procession of couplers of the same general type which filed through the patent office to oblivion.

The first automatic car coupler that would couple cars was the invention of Ezra Miller, patented in 1863. Miller was born in Bergen County, New Jersey, May 12, 1812. He was educated for a physician, but preferred engineering. He lived for a time in New York State, becoming a member of the National Guard. He was among the early passengers who rode behind the famous locomotive DeWitt Clinton on the Mohawk & Hudson Railroad. To this ride may be attributed an interest in railroads which was destined to produce important results.

Miller moved to Rock County, Wisconsin, in 1848, where he surveyed State lands, was elected to the State Senate and became a colonel in the National Guard. In those days platforms of the crude little passenger cars were placed, with couplers and buffers, below the car sills which form the line of resistance to longitudinal shocks. This grave error in construction was the direct cause of many serious accidents, the worst being telescoping in collisions. To obviate this defect Colonel Miller patented a combination of platform, coupler and buffer on a line with the car sills and coupling with compression of the buffers.

The Miller safety platform brought cars so close together that passengers could step from one to another without danger of falling between. Not only was the coupler positive in action, but the coupler hooks locked below the platform which, in case of accident, was expected to prevent one platform from rising above the other. Although the first patent was issued in 1863, it was not until 1865 and 1866 that patents fully protecting the devices were taken out.

The Miller safety platform, coupler and buffer was hailed as the greatest life-saving invention of the age. The invention (it may be spoken of in the singular since all three features went together) was remarkable in patent history for the quickness with which it secured and retained immediate and general favor. The Chicago, Burlington & Quincy Railroad had it in general use in 1867, and the Philadelphia, Wilmington & Baltimore in the following year. By 1870 it was in general use in the Middle and Western States. In the next few years it was in universal use on all railroads of consequence with two exceptions in the United States, and had even been

introduced to a limited extent in Europe.

One of the two important railroads which did not install the Miller platform, coupler and buffer was the Chicago & Alton. Its president, T. B. Blackstone, produced a combination intended to serve the same purposes as Miller's invention which was used on the Chicago & Alton from 1870 to 1885. The Blackstone coupler was not introduced on any other railroad.

The Miller Hook

Every old time railroad man can remember the famous Miller "hook." It was simplicity itself, consisting of a drawbar terminating in a right-angled hook opening toward the left when facing the car. Thus the couplers on two cars coming together were always in position to engage. A spring forced the drawbar to the center, while a guide opposite the hook insured positive action. The end of the drawbar, which was rounded like a blunt spear head, had a pocket in the end to receive a link when coupling with a car not equipped with the Miller hook and a hole for a pin.

In making a coupling with a link the latter was always placed in the hook regardless of whether the car to which it was attached was standing or was being moved back by the engine. To attempt to guide the link into the hook was pretty sure to result in worse trouble than mere failure to couple. Uncoupling the Miller hooks was performed with the aid of a long lever attached to each and extending diagonally upward alongside the platform railing. Sometimes the operation of uncoupling was easy; at other times it required the concerted efforts of the train crew accompanied by an obbligato of objurgations.

The Pennsylvania Railroad's exhibition train at the Centennial Exposition at Philadelphia in 1876 had link and pin couplings with wooden wedges driven into the links to take up slack. Yet the Miller coupler was then available.

The only explanation made on behalf of the Pennsylvania of the reason why it had not adopted a safety device on the market and widely used by other railroads was a remark by A. W. Gibbs, then general superintendent of motive power of that road, in reporting in 1905 to the International Railway Congress on the subject of couplers.

Mr. Gibbs said that "This coupler —the Miller hook—came into very general use throughout the United States; and it is probable that had the owner of these patents been diplomatic in pushing its introduction, the type might have become universal in America, for passenger equipment at any rate."

Since Mr. Gibbs did not explain wherein this lack of diplomacy lay we are at liberty to formulate any theory relating thereto that suits our taste, even if it isn't any of our business.

Miller's lack of diplomacy marked a turning point in railroad history. His coupler was used on passenger equipment only.

Eventually standard on all railroads but the Pennsylvania, it made the inventor a multi-millionaire, enabling him to return to his native State, New Jersey, where he was elected to the State Senate.

Meanwhile, the Pennsylvania Railroad, finding itself in urgent need of a coupler for passenger equipment as good as that of its neighbors, if not better, took up a device patented by E. H. Janney in 1877. Janney had been a field quartermaster with the rank of major on the staff of General Robert

E. Lee, in the Confederate army during the Civil War. After the war he became a grocery clerk. Janney hit upon the idea of the coupler by clasping his hands in a vertical position with the knuckles bent. Like the hands the couplers unclasped by opening at the knuckles.

The Janney coupler was first applied to passenger cars on the Pittsburgh, Fort Wayne & Chicago line of the Pennsylvania system under the direction of J. D. Laing. About 1878 the McConway & Torley Company purchased control of the patents and began making Janney couplers. They developed it so successfully that it was made standard for Pennsylvania passenger cars and soon afterward was also applied to freight equipment. After selling his patent, Janney purchased a farm near Alexandria, Virginia, where he spent his remaining years quietly. Here he died June 16, 1912.

First Real Automatic

THE Janney was the ancestor of all automatic couplers in use in the United States and Canada to-day; for it was first to adopt the vertical plane principle for its working parts and to make these parts simple, strong and reliable in operation. It was the first automatic coupler that would couple freight cars automatically and hold them together until released by a lever which could be worked without going upon or between cars.

It was a practicable device, the importance of which, in railroad operation, would be difficult to appraise.

Experience of the Pennsylvania Railroad, which in this instance, was a minority of one among American railroads, proved that which has often been demonstrated in human affairs; namely, that the majority is not necessarily always right.

Here we have the railroads about the beginning of the ninth decade of the ninteenth century with an automatic coupler tried out in service and found suitable for all kinds of equipment—the very thing they had been looking for all these years and the device that so many had been urging them to adopt. That ends the story, doesn't it?

Well, not exactly. On the contrary, the tale is just beginning to get exciting. In 1880 the authorities of the Province of Ontario held a public hearing on the subject of accidents to trainmen and examined a number of alleged automatic couplers, eliciting much information, though no definite action was advised. This or the inherent interest of the subject, or both, stirred the Connecticut legislature into calling a similar public hearing on accidents to trainmen November 29, 1881.

As a result of this hearing Connecticut enacted a law requiring all new cars built after a specified date to be equipped with automatic couplers, which should have received the approval of the State railroad commission. Massachusetts followed Connecticut's lead in legislation and her railroad commission approved, pursuant to law, five different varieties of automatic couplers, thus simplifying the difficulties of making a choice.

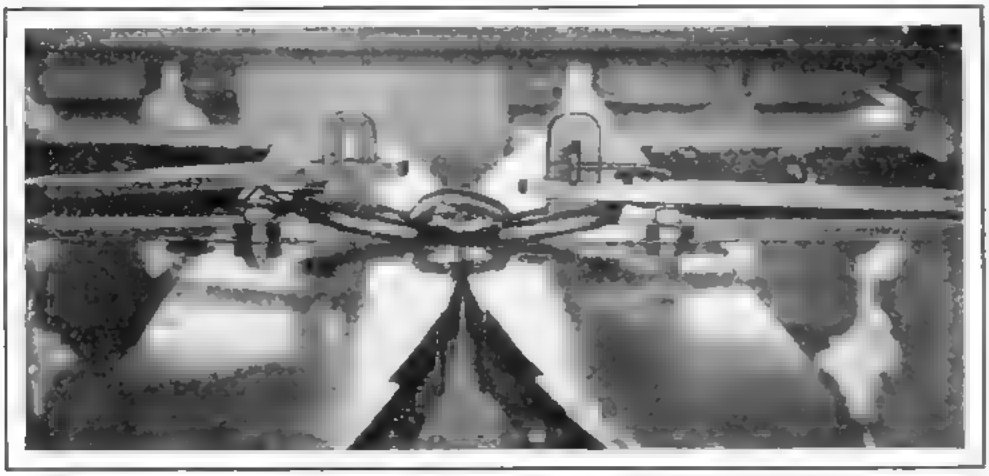
All the railroads had to do was to equip their cars with any one of the five approved automatic couplers in order to be allowed to do business in the Old Bay State. Between them the railroads tried all five of the approved varieties, only to find that not one of the lot would couple with any of the other four. Thus employees were in greater danger than ever in working with these

strange devices, and the last state of the railroads was worse than the first.

Michigan also came to the rescue of train and yard men with a law similar to those in force in Massachusetts and Connecticut, but was more liberal in its view, for the State railroad commission approved seven different kinds of automatic couplers, no one of which would couple with any of the other six. Several other States enacted similar laws with the same results. Not to linger over the harrowing details, by 1889 thirty-nine varieties of automatic couplers were being tried in service attached to eighty thousand, five hundred and ten cars. Each one of the thirty-nine totally failed to couple with any of the other thirty-eight

On this showing it is submitted that, individually, the railroads were making an earnest effort to solve the coupler problem. Collectively, they were working just as hard through the Master Car Builders Association. The chief difficulty was to secure unanimity. A majority were willing to pull together; but there were a few who preferred to follow their own inclinations.

As an answer to the growing storm of criticism of the railroads for their failure to adopt automatic couplers, regardless of whether they would couple cars or not the Master Car Builders Association planned a thorough discussion of the whole subject at its annual convention at Old Point Comfort, in June, 1885. All railroad commissioners were invited to attend the convention as representatives of the public. Railroad managers were also invited. Only two or three came, so the discussion and action founded thereon was limited to association members. It was decided to arrange for systematic tests of couplers to be presented at Buffalo in September, 1885, under the auspices of the executive committee of the Master Car Builders Association.



THE COUPLER ON A DEWITT CLINTON COACH IN 1831 THE FIRST COUPLER IN FACT

Conditions were that each kind of coupler entered for competition was to be fitted to both ends of two cars and to be subjected to tests in coupling on tangents and on curves of twenty degrees. No models would be considered. The entrants were also to furnish drawings and specifications with detailed weight and cost of each part and the cost of applying to cars already equipped with link-and-pin couplers.

Forty-six couplers were entered, but four of them never were heard from afterward, leaving forty-two which actually appeared for trial. Of this number nine had loose links with pin supporters. Ten had loose links with a catch, or dog, substituted for the pin, while two had fixed links. No fewer than twelve vertical plane couplers were presented for test, of which five had locks operated by gravity, four operated by a spring and three were guided by a "boot" like that on the Miller "hook." Of loose coupling bars there were three.

Four tests were arranged. First, coupling with the ordinary link and pin coupler, an essential requirement during the transition from the old to the new, since the railroads could not suspend operations while their cars were refitted. Second, coupling with its own kind at slow speed. Third, coupling with its own kind sharply. Fourth, could it be set *not* to couple when cars were brought together sharply?

It all seemed simple enough, but that is because we do not understand how many objections can be found to simple things. Right away there was a dispute about what a "standard" link was. The one used in the tests was ten and a half inches long, one and three-fourths inches wide inside, and was made of one and a quarter inch iron. Several said they used links two inches wide and considered that to be Master Car Builders standard. One road's representative said his road used links eleven and three-eighths inches long and one and five-eighths inches wide inside; and so on, and so on, world without end, amen!

Tests Made in Buffalo

WELL, the trials were held in the Hamburg Street yard of the New York, Lake Erie & Western, at Buffalo, from Tuesday to Thursday, September 15 to 17, 1885. The cars equipped with the test couplers differed five inches in height of drawbar above the top of the rail and the distance between car bodies ranged from nineteen to forty-four inches.

One of the test drawbars was broken in two in switching and lost before it began. In another the pin fell out and, besides, it was slow in coupling, even at slow speed. A third failed repeatedly. A fourth was badly broken in the tests, while a fifth broke a draft bolt, and a sixth uncoupled on a curve repeatedly while switching. A seventh was such a distinguished success in coupling that a pinch bar had to be used to uncouple it.

When the tests had been completed the executive committee went into secret session, from which it eventually emerged to recommend that six link couplers and six of the vertical plane types be given further trial in service. In other words, they were still eleven couplers removed from unanimous agreement.

In explanation of this failure to agree, the *Railroad Gazette* expressed the editorial opinion that it was "hardly within the limits of human possibility that one particular coupler will ever obtain universal adoption." Really, the executive committee was entitled to praise for having, by a process of elimination, simmered the thousands of devices thrust upon its attention down to forty-two and this number in turn down to twelve.

In the next two years the Master Car Builders learned still more about couplers and their uses. At the Burlington brake trials they discovered that slack in couplings was exceedingly objectionable in making air brake

stops. You see, up to that time railroad men thought slack in couplings was positively essential to enable engines to start trains. The result was that there was so much slack in the old link and pin couplers that a freight train progressed like an angleworm, by alternately stretching out and then hunching up its slack. The Burlington brake trials not only proved conclusively that slack could not be tolerated as it had been, but that it was not needed in starting trains. Starting power of locomotives was no less in the absence of slack than it was with slack.

This led the association in 1887 to recommend vertical plane couplers for adoption. This recommendation sounded the knell of all link couplers and marked the final and definite turn toward the couplers now in universal use in the United States and Canada.

Janney Becomes Standard

At that time there were three varieties of vertical plane couplers available: the Janney, Dowling and Thurmond. In the following year, 1888, manufacturers of the Janney did a remarkably broad-minded thing: they waived all claims for patents on contour lines of coupling faces of couplers used on railroads represented in the Master Car Builders Association. Thereupon the association, in the same year, adopted with slight modifications the Janney contour, believing that the principle of contact of surfaces of vertical cylinders embodied in the Janney coupler afforded the best connection upon both curves and tangents for cars with variations in the height of couplers.

Thus the standard coupler was definitely selected in 1888, although the vote was not unanimous. This is not the same thing as converting, by the wave of a magic wand, all car couplers of the many varieties then in use into a single standard. In short, the railroads were a trifle slow in equipping cars with standard couplers. But what could you expect, considering that the Master Car Builders Association did not have power to inflict the death penalty for failure to comply with its recommendation? Then there was the conspicuous example of the Pennsylvania Railroad which, by flocking by itself, had pointed the way to the correct principle embodied in the newly adopted standard coupler, to encourage recalcitrants. The transition period, from the old to the new, was bound to be trying under any circumstances; and delay from any cause only prolonged the difficulties.

This situation gave politicians just the opening they wanted. Mention has already been made of legislation in several States which not only entirely failed to produce any beneficial results for any one, but, on the contrary, made a bad matter distinctly worse. But, anyway, here was a nice, inviting field for legislation of which politicians promptly availed themselves. For instance Representative Seth L. Milliken, from the Third Congressional district of Maine, introduced a bill requiring that each car in use on the railroads should be equipped with an automatic coupler *on each end*!

This explicit requirement suggests interesting speculations. Were the railroads in the '80's operating cars with couplers on one end only? Or were they contemplating some such step, and did Congressman Milliken's discovery of the plot thwart it? A railroad will go pretty far for the sake of economy, and couplers cost a lot of money, even in those primitive days. For instance, a former general

manager of a well-known railroad made his principal bid for fame on the ground that he saved his company ten thousand dollars a year by the simple expedient of vetoing requisitions for links and pins in the not-so-good-old days when couplings were made with such things. He got away with it, too, thanks to the unwilling, but effective, coöperation of the night yard men. It worked like this:

THE CELEBRATED "MILLER HOOK" STANDARD AT ONE TIME ON ALL BUT TWO AMERICAN RAILROADS

When the night yard men reported for duty across the Hudson River from a well-known metropolis during this general manager's régime they would find about six hundred couplings to make and not a blessed link nor pin in the yards wherewith to make them because the day men had swiped them all to make up trains dispatched during the day. So it was the nightly job of the yardmaster to take a switch engine and a box car to the yards of a connecting line under the pretext of making a transfer. If any switchmen of the connecting line were hanging inconveniently around he would invite them into the nearest place of entertainment where he proceeded to make himself agreeable while his men collected links and pins as souvenirs of their visit.

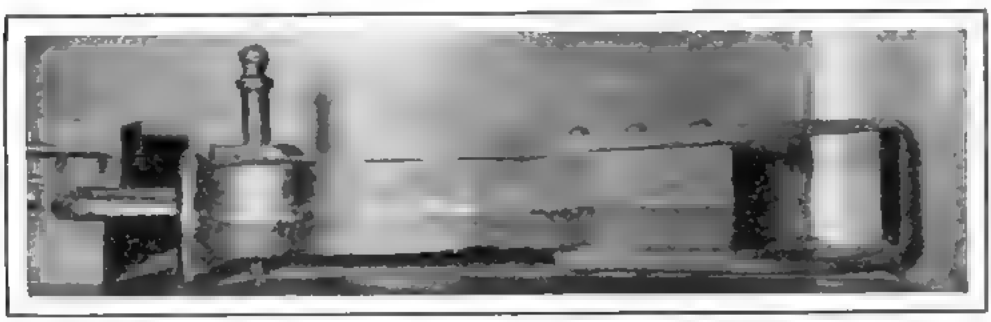
Souvenir hunting was mighty hard work because the hired hands on the connecting line were of such a mean disposition that they would set the brakes on two or three cars at the end of a string, then take up the slack and then set the brakes at the other end so that pin pilferers could not operate without climbing up and releasing the brakes, then climbing down and sweating and grunting to push the cars back, one at a time, by main strength and awkwardness to slack the pin. To have coupled an engine on to the string would have given them away. When the gleaners had amassed all the coupling paraphernalia they required for the night's work they would signal their yardmaster, and then the engineer would do his best to get away before the guests of the evening found out what had been going on while they were being so delightfully entertained.

Now, if a general manager would do that to save a few links and pins what would a railroad company not do to save one-half the cost of couplers, which are much more expensive than links and pins? It is a significant fact that never since Congressman Milliken introduced his bill has a car been placed in service with a coupler on only one end.

Congressman Milliken's bill also provided that the Secretary of the Treasury should be authorized to pay one hundred thousand dollars to the patentee of an automatic coupler to

be selected for relinquishment of his rights. The rights to the patent so purchased were to be turned over to the railroads, thus settling the coupler problem by legislative fiat. But as the bill provided no way to compel any patentee to accept one hundred thousand dollars for his invention, make the tale more interesting, nearly all the railroads fought their rescuer tooth and nail.

One of the most interesting figures in railroad history is Lorenzo S. Coffin, author of the safety appliance law, who devoted ten years of his life, entirely at his own expense, to bring



ONE OF THE NUMBERLESS VARIETIES OF LINK AND PIN COUPLERS IN THE NOT-SO-GOOD OLD DAYS

and as no inventor could see anything smaller than millions in his device, Mr. Milliken's inspiration probably would not have accomplished a great deal, even if it had become law, which it did not.

The Milliken bill and coupler legislation in various States already referred to are merely samples of a vast amount of trouble law-makers were cooking for the railroads. That is, a certain kind of law-maker. Fortunately, there are more kinds than one. In short, with law-makers—of a kind—making a frontal attack, with the recognized need of providing protection for employees on one flank, and urgent demands of growing traffic for something better than the archaic link-and-pin on the other flank, and a small but annoying minority hanging back at their rear, the railroads were in a pickle.

Dark Horse Hero

From this predicament they were rescued by a rank outsider; and to about its enactment. He had nothing to sell, nothing to gain but the satisfaction of doing his duty to his fellow men.

Lorenzo S. Coffin in his younger days was a professor in Geauga Seminary in Ohio, where two of his pupils were James A. Garfield, afterward twentieth President of the United States, and Lucretia Randolph, who became President Garfield's wife. During the Civil War, Coffin was chaplain of an Iowa regiment. At its close he settled on a farm near Fort Dodge. He was a successful farmer, who made money, even in those early days. He might have made more if he had not preferred to be open-handed, ready to help all who needed his aid. He was a Congregational minister. His generosity, ready sympathy and great personal magnetism made him one of the most widely known and best liked men in the State.

That was why his services were sought as right-of-way agent for the Fort Dodge & Des Moines Railroad,

which led to his appointment as one of the State Railroad Commissioners.

One day Commissioner Coffin was confronted with the choice of waiting several hours for a passenger train or of riding in the caboose of a freight train. He chose the latter alternative, and, as was perfectly natural for him, at once struck up a friendship with the hind man. Before the end of the trip the hind man attempted to make a coupling and had a hand crushed Coffin did all he could to mitigate the pain.

The mishap sickened him. He became so interested that thereafter he traveled principally by freight train that he might become better acquainted with railroad men and learn more about their lives. What he found out led him to resolve to devote his time and means to an effort to ameliorate the conditions under which trainmen worked.

His fellow commissioners refused to have anything to do with this task which Coffin assigned himself. So he drafted a bill requiring all cars to be equipped with automatic couplers, power brakes and other details, afterward known as "The Safety Appliance Act." He submitted it to a friend who was a justice of the Iowa Supreme Court to pass upon its form, language and constitutionality. When the bill was perfected Coffin first submitted it to the Iowa Legislature, which enacted it into law.

This was merely the prelude to Coffin's campaign for safety for railroad men. He wrote letters to the newspapers and to religious and family periodicals; he attended every meeting that he could reach, where he made addresses on the subject if he was permitted. Often he found a cold shoulder instead of an opportunity to speak

Then, taking his Safety Appliance bill, he went to Washington, where for four years he labored throughout every session of Congress for its enactment. Coffin's crusade for greater safety for railroad men was carried on under difficulties hard to realize in these days. He said himself that he never could have persevered until success was won if he had not felt that he was commissioned by Divine Providence for the task

His bill required safety appliances not yet invented as well as automatic couplers. It was hardly surprising, therefore, to find himself strongly opposed by all the railroads with the exception of the Vanderbilt lines (New York Central).

Coffin's long years of labor came to a triumphant end when President Harrison signed the Safety Appliance Act March 3, 1893. That signature put the force of law behind the efforts of the Master Car Builders Association to hasten the introduction of automatic couplers. This help came at the exact psychological time to be effective; for the vertical plane coupler had by this time had sufficient opportunity to demonstrate that it fully met requirements in principle and only needed a few refining touches and an opportunity to grow with demands upon it made by increasing traffic. The long and distracting search was ended.

After manufacturers of the Janney coupler had waived all claims to patents on contour lines in 1888, as already related, it was known as the "M. C. B." (Master Car Builders) coupler and is so known to-day, though it is so much larger and stronger and even so altered in details apparent only to the expert eye that its inventor might be pardoned if he failed to recognize his own device if he could return to earth.

Hard Rock Romance

Men, Money and Magnificent Courage Combine to Make Possible the Great Mountain Tunnels

By Katherine Louise Smith

THE cost of moving a freight train over a mountain railroad as compared with the cost of haul over the prairies of Illinois is something that no hard figuring railroad executive likes to think about. Especially a mountain executive.

Time was when the minds of officials were considerably hard to turn to more modern and efficient ways of doing things, but those days are gone and that type of official mind has gone with them. In these times when the economic experts see where a piece of mountain railroad is too costly to maintain because a better stretch of going can be had by merely going through a million tons of rock wall with a tunnel, costs are estimated, figures are resorted to, and things begin to happen.

Look at the Great Northern. Up there in the far northwest corner of the United States there stands to-day a monument to American engineering and railroad brains. It's a marvelous example of what applied intelligence can do. It is the Cascade Tunnel, bored through rock for a distance of 7.79 miles, a hundred miles east of Seattle, between Scenic and Berne.

This bore is the largest in the western hemisphere, and the Great Northern is willing to-day to tell you what it has meant to them since it has been opened.

Except for the Alpine tunnels, which are greater in length, this Cascade job can be considered the greatest undertaking of its kind. In point of time taken to construct, in ventilation, drainage and operation it is the most modern of all tunnels. And perhaps the most profitable.

This important project was closely watched by the public during the period of construction, but little has been said regarding the results obtained.

Since its completion there has been a thirty per cent increase in the transcontinental business on the Great Northern. The savings in operating costs over the old line as compared with the new line, electrified and through the tunnel, are sufficient to cover interest charges on the twenty-five million dollars in improvements.

All of this is interesting, but the new tunnel caused something of an upheaval among the other roads.

Cut Running Time

At the time the tunnel was built the trains running from Chicago to Oregon and Washington were on a sixty-eight hour basis. Though the new tunnel made it possible for the Great Northern to reduce its running time between Spokane and Seattle by nearly two

hours, out of courtesy to the other roads it maintained its old schedule.

Northwestern cities then demanded a faster passenger service, and the result was a series of conferences in which State and city officials, legislators and railway presidents took part. Then, out of a clear sky, the Great Northern announced it would meet the time of the fast California trains with a new train to be called the Empire Builder, and that there would be no extra fare.

That started a commotion. The other extra fare trains, and on those which they retained they further reduced the running time in order to justify the extra fare. Soon the ripples in the pond which the large pebble, the Cascade Tunnel, caused, widened until cuts in train time all over the country ensued, new fast trains were put on, and in some cases extra fare was eliminated.

Statistics are dull reading, but a comparison of the new Cascade Tunnel with the world's longest railway tunnels is noteworthy:

WORLD'S LONGEST RAILWAY TUNNELS

Name	Location	Length.	Cost.
Simplon 1*	Switz.-Italy	12.4 mi.	$16,000,000
St. Gothard . .	Switzerland .	9.26 "	11,300,000
Loetschberg	Switzerland	9.0 "	10,060,000
Mt. Cenis	France-Italy .	7.97 "	14,580,000
New Cascade	Great Nor. Ry Washington, U.S.A.	7.79 "	14,000,000
Moffat	Colorado, U.S.A. ..	6.11 "	14,853,000

*A double tunnel. The second bore was completed in 1921.

AMERICA'S LONGEST RAILWAY TUNNELS

Name	Location	Length	Built
New Cascade	Great Northern Ry.—Washington.	7.79 mi	'25—'28
Moffat	Colorado ...	6.11 "	'23—'28
Connaught	Rogers Pass, B.C.	5.02 "	'13—'16
Hoosac	Massachusetts .	4.38 "	'54—'76
Mount Royal	Montreal	3.09 "	'12—'14
Cascade, G. N. Ry...	Washington ..	2.63 "	'97—'00
Twin Peaks	California ...	2.27 "	
Snoqualmie Pass	Washington	2.25 "	'12—'15

Northwest roads all announced they would meet the Great Northern's new time and an eastbound schedule of sixty-one and a quarter hours and a westbound schedule of sixty-three hours followed, none of the trains to be of the extra fare variety. The California lines then eliminated half their

Tunneling through hard rock is as old as the Egyptians, Aztecs, Greeks and Romans. A Theban king on ascending the throne began at once to drive the narrow entrance to his rocky tomb, but the first built-up tunnels of which there exists records were made by the Assyrians, a notable example of

THE GREAT NORTHERN'S NEW EMPIRE BUILDER LEAVING THE WEST PORTAL OF CASCADE TUNNEL

their work being the tunnel under the Euphrates River. Only hand labor was employed, but records show they had picks, shovels and wedges. The Romans, however, rank as the greatest tunnel builders of antiquity in the number and magnitude of their works. Their method of operation was to build huge fires in front of the rock to be broken down and when a certain temperature was reached to cool the rock by throwing water on its surface. Sometimes vinegar was added to the water to hasten the cooling process. All this was hard on the workmen because of the heat and gases, but this was of small moment to the builders who employed slaves and prisoners, who toiled like lost souls and perished by the thousands.

A Roman Heart-Breaker

In a tunnel built in the time of the Emperor Claudius, about 52 B.C., it took thirty thousand men to bore three miles in eleven years. The longest of the tunnels of early Roman days was built to drain Lake Fucino, and besides their use of fire the Romans had knowledge of the use of vertical shafts in order to prosecute the excavation at several different points simultaneously.

The tunnel builders of the Middle Ages added little to the art. In fact previous to 1800 the soft ground tunnel was beyond the courage of engineers except in sections of small size. In 1803, however, a tunnel was excavated through soft soil for the St. Quentin Canal in France, and from experience gained many of the various systems of soft ground tunneling now employed were developed. But before this, in 1679, gunpowder was used on the Languedoc Canal, and this so improved the methods that tunnels were constructed on the Liverpool and Manchester Railway in England. Shortly after, the Alleghany and Portage Railway in Pennsylvania constructed what is said to be the first railway tunnel in the United States. This was the beginning of rapid development in railway tunnel structure.

Tunneling entered its great phase with the construction of the Mont Cenis bore in Europe and the Hoosac Tunnel in America, which works established the utility of machine rock-drills and high explosives. The Mont Cenis Tunnel was built to facilitate travel between Italy and France. It was completed in 1871, is 7.97 miles long, and passes under the highest point of the mountain. Compressed air as a motive power for drills, aspirators to suck the foul air from the excavation, air compressers and other appliances found at Mont Cenis their first application in tunnel construction. Sommeiller, one of the engineers on this work, devised the first power drill ever used in borings of this nature. About this time the Hoosac Tunnel was started in this country and it also established the utility of improved machinery and high explosives.

Trails of the Hoosac

This tunnel is driven between Troy, New York, and Greenfield, Mass. It is 4.38 miles long, and runs through the southern spur of the Green Mountains. It took many years to build, and work was suspended at times because of lack of funds.It was enlarged in 1926, and although its construction to-day would be looked on as a simple engineering feat, at that time it was considered a great undertaking. Some of the men employed were brought to this country when the Mont Cenis was completed. The completion of the Hoosac was a powerful incentive to tunnel building,

for its construction introduced the modern methods that were beginning to be used in Europe.

The Mont Cenis, together with three other Alpine tunnels, have long been considered among the triumphs of a shorter route to France and Great Britain. After a little over seven years in construction the bore was formally opened and trains from Italian and Swiss entrances met in the middle and after the iron door which marked the

MUCKING MACHINE AT THE EAST PORTAL OF THE CASCADE BORE

man. The Simplon, 12.4 miles, is the longest of the Trans-Alpine tunnels For thirty or more years proposals were made to traverse the Simplon by railway, and out of thirty suggestions twenty-eight of these were for tunnels: Finally it was decided to construct a low-level tunnel with easy gradients

The tunnel lies not far from the highway that Napoleon built. It runs almost in a straight line, and gives Italy boundary line had been removed, proceeded together to Iselle, where inaugural ceremonies took place. There are two separate tunnels parallel to each other, the second one being for ventilation.

The construction of this tunnel carried with it a glamour that seemed almost theatrical. When the last piercing was telegraphed from one end of the world to the other all nations were

thrilled and every Swiss and Italian citizen rejoiced. Though the Mont Cenis Tunnel had started the use of improved methods some time before, such marked advances had been made in methods and machinery that the Simplon cost less per foot. The Loetschberg and the St. Gothard are two great tunnels located in Switzerland on international railroads. The St. Gothard took nine years in building. Working day and night, the progress was about a mile a year. An annoying experience in the St. Gothard was the sinking of about a hundred yards in the completed portion of the tunnel. The section was enlarged and lined with granite masonry.

Tunnels in America

These marvels of tunnel building quickened the incentive of engineers all over the world, and America began to construct railway tunnels, remarkable for their length and excellent construction. An outstanding example is the noted Connaught or Rogers Pass Tunnel, built in 1913-1916 under Mt. MacDonald and piercing the summit of the Selkirks. Until 1916 the Canadian Pacific Railway crossed the Selkirks through Rogers Pass, named in honor of Major Rogers, one of the pioneer surveyors of that region, who discovered the route. The road bent round in a series of sharp curves which gave magnificent views of the mountains, but this spectacular route had many disadvantages in the way of track curvatures and the necessity of maintaining many miles of snowsheds.

The Connaught Tunnel, named in honor of the Duke of Connaught, Governor General at the time of its opening, measured slightly over five miles from portal to portal. It is double tracked, cement lined, and measures twenty-nine feet from side to side. It not only eliminates track curvature to an amount corresponding to seven complete circles, but lowers the summit attained by the railway by five hundred and fifty-two feet, reduces the length of the line four and one-half miles and dispenses with nearly five miles of snowsheds.

This was one of the first tunnels to use a pioneer tunnel or bore paralleling the center line of the main tunnel. The feature was so new that it aroused the universal interest of engineers.

Canada has also some remarkable "spiral tunnels," constructed so that the railway doubles back on itself twice and forms a rough figure 8 in shape. From the east the track enters the first tunnel under Cathedral Mountain, 3,206 feet in length, and after turning almost in a circle and passing under itself, it comes out forty-eight feet lower. The track then crosses a river and enters the second tunnel, 2,900 feet long, under Mt. Ogden. Again turning part of another circle and passing under itself it comes out forty-five feet lower and continues to the west. These spiral tunnels were driven through crystallized limestone of a widely distorted nature. Variation in the hardness of the rock, water seepage, high altitude and severe winter weather added to the difficulties of the task.

Then the United States awoke and the Moffat Tunnel was built, which, until the construction of the Cascade Tunnel, was the longest and most noted of the tunnels in America. The Moffat was built through the Continental Divide, fifty miles west of Denver, at an elevation of 9,200 feet. This 6.11 miles bore was due to far-seeing vision. It is the realization of a dream of twenty-seven years ago and

was completed after heartbreaking difficulties with Nature, covering a period of over four years. It solves the problem of dealing with snow-blocked mountain passes, lessens the distance

WHERE THE WORKMEN WERE HOUSED AT THE WEST END OF THE CASCADE TUNNEL NEAR SCENIC

between Denver and Salt Lake City, and opens up a rich country.

The tunnel is the fruition of the dream of David H. Moffat, who first attempted to conquer the Great Divide and died in 1911 with his efforts apparently defeated

Birth of the D. & S. L.

Winning the approval of prominent and wealthy pioneers, he started the Moffat Road, officially known as the Denver and Salt Lake line. He was then sixty-three years old, a successful man and millionaire. Surveys were made and a route laid out, but the forces of nature were tremendous, and soon Mr. Moffat and his associates realized they had undertaken an almost insurmountable task. They had hoped that the railroad would throw open to settlement a part of Colorado which was hemmed in by mountains. Yet this was territory rich in natural resources and agricultural possibilities.

Convinced that the railroad would be a success, Mr. Moffat devoted his entire fortune to the project, besides going East frequently to interest financiers. During one of his trips to New York in 1911 he died with his road

only two hundred and twenty miles from Denver. Other persons carried on, but the road operated with loss of money, the deep snows alone causing much of the trouble and expense.

Then a miracle occurred. Oil was found. Mining of coal expanded. Colonists came and the tunnel idea which Mr. Moffat had proposed some years before took shape. The first definite step was taken in 1913, when the city of Denver planned to issue bonds for tunneling under James Peak. The Colorado Supreme Court decided the city had no right to issue bonds for this purpose. Then came the plan to provide funds from the "improvement district benefited by the tunnel." The Moffat Tunnel Improvement District was made responsible for the construction of the tunnel and the leasing to railroads. This method of financing a long needed tunnel by selling bonds guaranteed by the district benefited is novel.

The tunnel, when completed, reduced the distance between Denver and Salt Lake City, shortened the Denver and Salt Lake Railway twenty-three miles, making transportation more rapid and certain, and reduced curvatures and grade. It is sixteen feet wide by twenty-four feet high, and makes a saving of 2,406 feet in elevation. The eastern portal is at an elevation of 9,198 feet and the western portal has an elevation of 9,085 feet.

This tunnel has a peak in the middle so it will drain easily. New machinery was devised to meet some of the requirements. These included an electric mucking machine and an air hoist for switching cars. An important part of the equipment was designed by George Lewis, general manager of the commission, who had wide experience in mining, timbering and construction. Cave-ins were frequent and caused worry, delay and expense. Mr. Lewis was lying awake one night turning the problem over in his mind when an idea came to him. He called a conference of his associates in the small hours of the morning and the Lewis cantilever or steel girder came into being. The device consists of a cantilever of steel girders which is laid across the roof of the tunnel while permanent roofing is being constructed. The first cantilever beam was so successful that others were ordered. They saved hundreds of dollars in money and months in time.

Work progressed satisfactorily through many difficulties. A soft spot in the mountain's heart was encountered, and the interior of the cut began to bulge. This took time to remedy. Underground rivers were another source of trouble, and it was necessary to pump them out. Here, also, a pioneer tunnel was bored which permitted the expeditious drilling of the railway tunnel. It is eight by eight feet, and, like the railway tunnel, 6.11 miles long. It runs parallel to the main tunnel and was designed not alone as a help in boring the larger tunnel, but for a water tunnel to transport water from the western slope for municipal and agricultural purposes in and around Denver. During construction cross-cuts connected the two tunnels and assisted in ventilation and moving masses of rock. The railway tunnel is leased, equipped with a standard single track, and is considered one of the outstanding engineering feats of the West.

Preparing for the Cascade

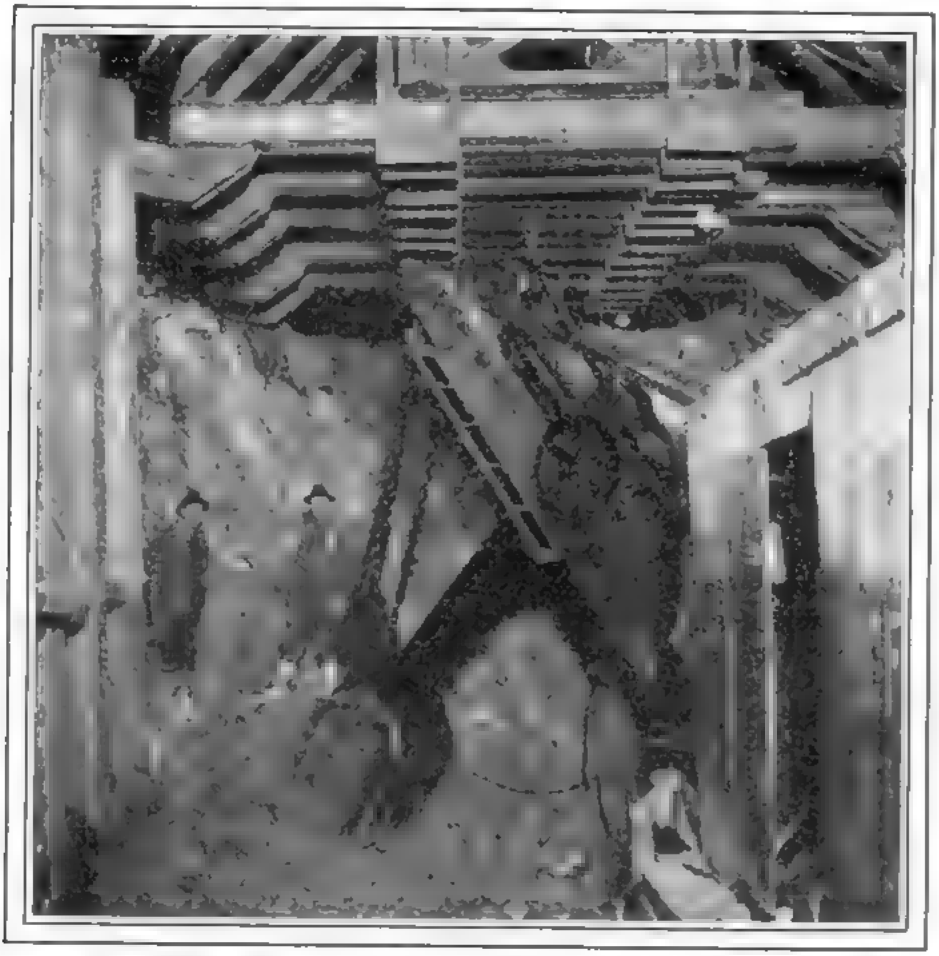
It was in 1925 that the Great Northern Railway decided to construct the Cascade Tunnel, now the longest on this continent. The initial engineering problem consisted of finding the most

ENTRANCE TO THE MOFFAT TUNNEL ON THE D. & S. L. FIFTY MILES WEST OF DENVER

practical route for the tunnel through the primary ridge of the Cascade Mountains. In 1889 John F. Stevens discovered the elusive Marias Pass in the Rocky Mountains, an important

tiary to Russia, directing the reorganization of the Trans-Siberian and Chinese railways for the Russian Government during the war.

When he was in charge of the sur-



THE LEWIS TRAVELING CANTILEVER GIRDER, BUILT TO AID IN THE BUILDING OF THE MOFFAT BORE

incident in railway engineering. At that time he was assistant engineer of the Great Northern Railroad. Later he became chief engineer and general manager of the road, and is generally known as the engineer in the construction period of the Panama Canal and as head of the American Advisory Commission and Minister Plenipoten-

veys from Spokane to Puget Sound he examined the whole country and finally noted a gap in the Cascades which he knew was the pass he wanted. It was winter, but waking or sleeping it was on his mind. In his own words:

"Now you may all think I was crazy and that only Conan Doyle could see it as I saw it, but I woke up one

ENTRANCE TO ONE OF THE SPIRAL TUNNELS NEAR FIELD, B. C

morning in March with an idea. I have always thought that I dreamed it—subconscious mentality probably. I picked up my faithful co-packer and went into the mountains. We had no snowshoes, but by starting early the crust on the snow would hold us up for hours. We went on up the valley and, standing on a point above, I sketched out what was afterward known as Marten Creek loop."

Mr. Stevens was impressed with the fact that the Cascade route lent itself to important refinements. He had in mind a Cascade crossing that would later justify the then prohibitive cost of piercing this ridge with a gigantic bore.

Originally the Great Northern crossed the summit of the Cascades by means of a series of switchbacks. These were eliminated later when the old Cascade Tunnel, two and two-thirds miles long, was completed. In 1925 the further refinements anticipated by Mr. Stevens were authorized. It was decided to construct a longer tunnel, relocate all but seven miles of the fifty-mile line between Peshastin and Scenic, eliminate twelve miles of tunnels and snowsheds and electrify seventy-five miles of road between Appleyard and Skykomish.

This program was completed at a cost of twenty-five million dollars. Driven as straight as a rifle bore, excellently ventilated and electrically operated and lined throughout with concrete walls, the finished tunnel stands to-day as the finest example of tunnel construction in America. The tunnel alone cost fourteen million dollars.

To accomplish it the work went on without interruption night and day for three years, and never for eight hours at a time did the workmen cease their activities. It was the ambition of the railway officials and contractors that this tunnel should be completed in three years, a degree of progress twice as rapid as any previous construction of a work of this character, and enthusiasm and determination won.

The vanguard of the contractor's men appeared on the ground at both portals a month after work was authorized, clearings were begun for camps, and wagon roads were built. In three months, in the dead of winter, three modern construction camps were built. Actual driving of the gigantic bore then began.

Construction of a long tunnel through a mountain range required that work should proceed in several places at once, since only a limited amount of machinery could be brought into action through the two portals. To facilitate matters advantage was taken of the fact that a deep valley, through which flows Mill Creek, about two miles from the East portal, lent itself to the purpose of opening additional working faces and afforded an outlet for pumping water from the tunnel works. Another device for increasing points of attack was the construction of a temporary tunnel eight feet high and nine feet wide, called the pioneer tunnel, and located fifty-two feet south of the main tunnel.

The Mill Creek shaft and the pioneer tunnel allowed the men to attack the main tunnel through several different faces. Through this pioneer tunnel were run the huge air conduits which supplied all parts of the workings, the compressed air pipes which furnished power for drills and shovels and the power lines which operated other machinery and lighted the workings. Trains carried workmen through it and removal of rock and furnishing

A PANORAMIC VIEW OF THE SPIRAL TUNNEL COUNTRY SHOWING THE TUNNEL PORTALS—ONE ON THE EXTREME LEFT AND THE OTHER AT THE LEFT JUST BELOW THE SHANTY

of supplies could be accomplished without interfering with enlargement operations and the lining of the massive concrete walls of the main tunnel.

Sometimes almost two thousand men were employed at one time. Skilled workmen, the latest machinery, electricity, compressed air and dynamite did the work. Although solid granite was encountered throughout, the interior is reënforced with concrete walls, averaging two feet in thickness. The cycle of the various operations which followed in regular sequence from the moment the drills were started against a new face of rock until they were ready to drill again on the succeeding face constituted a round, each round accomplishing an advance of eight feet. Five rounds in twenty-four hours was the objective which was considered a perfect score. This would be a progress of twelve hundred and forty feet a month. The great problem was to cut down delays.

Right Reckoning

Engineering problems were mastered by a staff of railway engineers headed by Colonel Frederick Mears, and so accurately and carefully were calculations made that when the pioneer headings met three thousand feet underground and four miles from the West portal the lines as carried in from the two ends were only seven inches apart, with a difference in elevation of only nine inches and a difference in actual and calculated distance of only twelve inches.

In spite of to-day's excellent tools tunneling is not easy. Inside the tunnel there was excessive water to contend with, and the terrific pace at which drilling, blasting and excavating were carried on made it difficult for engineers to set points for grade.

In all tunnel building there are some fatalities, but in boring the Cascade there were among the fewest ever recorded for a similar job. Contrast this with the Hoosac Tunnel, where the death toll came to one hundred and ninety-five. This was partly due to fire breaking out in one of the shafts. To-day modern methods and safety devices have made tunnel driving a comparatively safe operation.

Years ago tunnel camp conditions were deplorable and wages for hard rock men were low. The tunnel laborer to-day has good pay, and provisions are made for his comfort. In the case of the Cascade Tunnel three main camps were established, one at Mill Creek shaft and one at each portal. Bunkhouses for common labor were made large enough to hold ten men each. Skilled labor, shifters and foremen were given similar quarters, usually with six men in a house. Men were not allowed to bring their own bedding, but sufficient bedding was issued each man, and linen was freshly laundered without cost.

Shower baths, individual lockers for clothes, laundry, barber shop, recreation hall, reading rooms, radio and movies made camp life attractive. About one hundred women lived on the job from start to completion, and the contractors give them credit for maintaining the morale of their organization, and say its effect was equal to the labors of four or five able-bodied men.

Another refinement of the Cascade Mountain work was the construction of about twenty miles of new line on the east slope. It is called the Chumstick Line, because for several miles it follows the scenic Chumstick Valley. Then came the third phase of improvement in the entire electrification

of the Cascade crossing. The electric locomotives for hauling the trains over the seventy-five mile stretch of electrified line and through the new tunnel are the largest and most powerful of their type. Both Westinghouse and General Electric locomotives are used. Besides several other new features they are unique in that they utilize the economical advantages of both alternate and direct currents. Smoother operation, of course, is the result.

The purpose of electrification was to afford clean and pleasant train operation through the large tunnel. Because the new relocated approach will have no serious snow problems and the new tunnel carries the tracks under the zone of the heaviest snowfall, the improvements eliminate delays incidental to snowsheds and keeping the tracks open in winter. The tunnel and relocated East approach shorten the crossing nine miles, lower the summit five hundred and two feet, eliminate curvature equivalent to more than ten circles, do away with nearly eight miles of massive snowsheds and reduce the running through tunnels and snowsheds by more than two miles.

The Tunnel Builders

(Remarks by the hard rock boss at the finish of the Cascade Tunnel)

By Norman H. Crowell

WELL, there's your tunnel, folks—our gang is through with it—
Where do we go from here?—that's all we ask;
We've done our stuff—don't care what you do with it
(Hey there, McGilligan—put up that flask!)

We're not a pretty bunch. Dust an' tobacco juice
Don't help your looks when there's clay in your hair;
But we're the buckos who jarred the old mountain loose—
(What's that, Stanofski? Shake hands? Stick 'er there!)

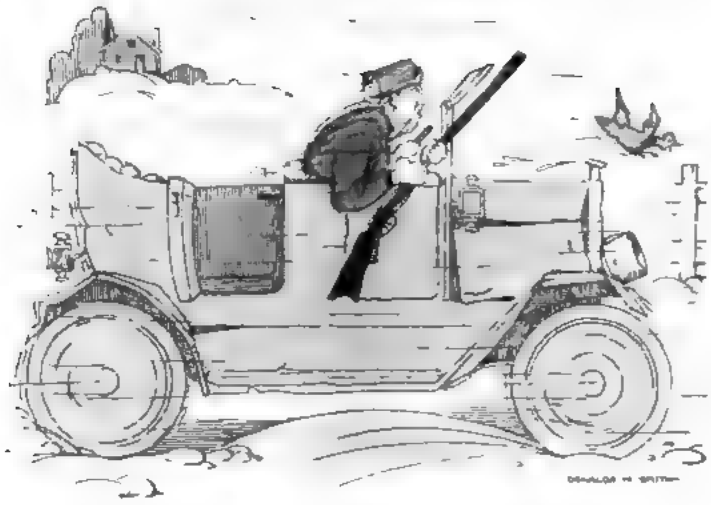
Gang up around me, lads—we're due to separate—
Bozos like us must be soon on our way;
Quit cryin', Gittani—you dirk-luggin' reprobate—
Whadda ya think ye are—Queen o' the May?

Portal to portal now—ain't she a crackerjack?
Stand here beside me an' look at that view!
(Say, Mogolooskey, you measly ould turtleback,
Get ME to sniffin'—I'll land one on you!)

Right through the rock she went—drill stem an' auger bit
Shoved by our sweat and th' hammerin' air;
Steam pumps an' dynamite, muscle an' bloody grit—
Death clawin' after us—what did we care!

Eight nifty miles she goes—right thru th' granite stuff—
(Hold on there, Isenstein—slip me a chew!)
But not a single man hollered he had enough—
And ain't she a dandy—we leave it to you!

Off with them dirty hats—daubed with th' muck of it—
Now for a cheer, me lads—whadda yuh say?
Here's to our tunnel, boys—great be th' luck of it—
Give 'er a good one, men—HIP! HIP! HURRAY!



SYMBOLIC FIGURES—"JUSTICE HOT-FOOTING CRIME

Observations of a Country Station Agent

Loose Change at Lone Oak Occupies Luther Leghorn and Agitates a Mad Man-Hunt

By J. E. Smith

MOSE HOKUM, our section foreman, stopped at the station to look into the mail box for the usual daily documents from the road supervisor's office.

"Luther," he called to me. "Did you hear about the robbery?"

"What robbery?" I asked.

"It happened about an hour ago over at Paris Crossing," Mose went on. "A young lady drove up to the bank in a runabout. A young man who was with her got out and went into the bank. He covered the cashier and one customer with a gun while with the other hand he scooped up all the currency in sight. They say he got about three thousand dollars. Then he hopped into the runabout and they were off. They drove in this direction. Thought maybe you had seen their smoke as they went by. They did the job in about two minutes time. Didn't make much fuss about it. Hands up, and that's about all there was to it. And a young woman doing the driving. Think of that."

"What's this country coming to?" I asked

Mose did not have any ready answer to that momentous question. Any other sturdy patriot would have assured me that we were headed straight

for the bowwows. I do not know what sort of a place that is or where it is located, but there seems to be a general unanimity of opinion that as a people and country, that is our destination. This is an important matter. Here we have a great and final terminal station for all humanity. It should be listed in the official guide and Einstein should figure out the exact minute of our arrival. We should have some definite scientific information on it.

"Well, well," I observed in my low sepulchral voice that I use when dispensing grave truths, "people will take any chances and go to any lengths for their mazuma rather than work for it."

Mose agreed with me in that. Then he went on ruefully:

"A young woman, too, think of that. They bob their hair, they show their knees, they smoke cigarettes, now they are robbing banks. It is cold murder next.'

Mose gave a gloomy sigh as he catalogued the progressive deterioration of sacred womanhood to ultimate slaughter. Then he wrote out a message to Supervisor Slagle that he had spiked the mill track switch at Hackberry. We cannot stop our railroad because of the degeneracy of our sisters. Maybe as a nation we shall make out to muddle along. Vain hope, but perchance our fair partners, once reaching the low level and havoc of butchery and carnage, will turn back to coddling babies.

I ventured to cheer Mose with that pious, lullaby hope.

After Mose and his gang were gone, I sat in the office and thought of robbery. We have no bank in Lone Oak. If some prowling offspring of Jesse James or Bob Younger should come into our peaceful village examinating and investigating good looting prospects, he will at the first glance hit on the general store or the depot. Unless I have an express package of value in my possession, he will not make much of a haul robbing my place. The treasured pin I wear in my necktie is a Muskatatuck pearl. They sell by the gross. I know all this, but the robber does not. He may size up the depot as a fair loot, I thought on.

What would I do if a live yegg should step into my place, cover me with his handy artillery and say: "Flappers up!" What to do should be thought out in advance. It should all be planned in cool deliberation so that there will be no unpleasant hitch in the performance.

Neither in the office equipment nor as my personal property is there a pistol or stiletto for attack or defense. In such a situation I would have to do one of two things. I am handy with words. I might talk him out of his evil intentions, or, in the line of belligerent resistance, I might hurl the ink well at him. My delivery is none the best. It is likely I would miss the plate. "Too wide, ball one." That would be the robber's cue to open fire. Whereafter there would be a lily harp and a rose wreath with reading, "Faithful to his Trust." The job would be bulletined, and these memoirs would come to a gruesome finis. This must not be.

My ancestry is known to have fought with Cromwell, Washington, Scott and Grant, but here is one milksop, jellyfish scion so degenerated in the heroics that he has resolved to comply with the utmost celerity any "hands up" request where there are firearms insinuations with it. Now that is all settled.

Hardly had I determined this matter in my own mind when a young man stepped up to the ticket window. He

was well dressed and had an air and appearance of gentility. I turned pea green and my hair began to lift, and I started to throw up my hands when—

"Beg your pardon," said he politely. "Will you let me have your official guide for a few moments?"

I was relieved and pleased to do this. The book I passed him was somewhat soiled and the edges were curled by long thumbing. It was showing its age

"Well, well," said he, looking it over. "This copy is four months old. Haven't you any later guide?"

I informed him it was the last word on schedules and facilities that our station could give him.

"How come?" he asked

"It is this way," I explained. "This is not an important station. We do not have daily use for a guide. We get ours fourth hand. Every month new guides go to the heads of departments and to the larger and more important stations. Each one so supplied sends his month-old guide to a less important place until on the fourth flop one lands here."

"That makes you about zero in classification importance," he observed. "Seems to me this cannot be very accurate information. A passenger in a grade four town should have as trustworthy information, when he seeks information, as a passenger in any big terminal. Doesn't it appear that way to you?"

"I agree with you in all that," I replied. "But it is just not so provided for. We cannot do anything about it here."

"That is one nice thing about the railroad business, I observe," the young man went on. "There is never any individual responsibility. Whenever you make a complaint about the service to any one it is dismissed with a shrug. Can't help it. Can't do anything about it. Oh, well, I'll look through the book. It may have what I want to know."

"Perhaps I can tell you," I volunteered.

"I'll find it," he replied, taking the book, and coming on into the office with easy and familiar confidence. "If you do not care I will sit down at your desk. I want to copy some figures. It will take me a few minutes. Thank you for the pad. Now let me get a line on the original train out of Camden to Amboy 1831."

With that insinuation of antiquity he opened the guide.

"By the way," said he, poising a pencil, "will you do me the kindness to step out and inform the young lady waiting for me in the car that I will be out soon, and to have patience, and thank you very much."

He reverted to the book.

II

THERE was that air of polite assumption, that genteel urge of authority about him, that I found myself doing at once exactly what he asked of me. Nature builds some of them that way.

I found the young lady at the wheel of a very smart runabout.

I was coatless, but I removed my cap, and I informed her in the finest Lone Oak gentility, that Lothario would be along very soon.

She smiled at me. It was a most winning, alluring smile. I, mossy as I am, know the fifty-seven varieties of feminine smiles, and this one was of spice and sirup. I loitered a bit. In my rustic simplicity I wanted further stimulation.

"This is a lovely morning," she ventured with easy grace. "The air is so

pure and the sunshine so clean. I have been listening to the soft call of birds. I take it they are beyond the meadow or from the distant hills. There it is again. Did you not hear it? Can it be nightingales, or whippoorwills, or orioles, or auks, or penguins, or—"

The dear thing, she was getting out of range fast. She would be guessing the condor, the ostrich, or the sacred ibis next, so I broke in—

"Turtle doves, madam," I explained as though Audubon was my uncle, and to cut her off from further ornithological conjecture. "That is the call of the turtle doves. They sound far away, but they are much nearer. Their voices are deceiving. Their call is soft and low. Many think it is the finest music of the countryside."

"How nicely you put it," she said, smiling again. "Do you happen to have a match, I wonder?"

Then from the folds of silk and velvet she whipped out a cigarette.

She was the first woman cigarette smoker I had ever met. In the turtle dove peace of Lone Oak it is not openly done. We still think of sacred womanhood, even if some of our very old pioneer mothers do cling to their clay pipes. I was shocked. The fair debauchee took no note of that.

"Did you say you had a match?" she asked again.

As I always carry them as regular equipment, I produced one.

"It would be nice if you would give me a light." She leaned toward me

I saw nothing within easy reach of me but polished surfaces, so I lifted a leg and frictioned a blaze off my pantaloons. In our regular sawmill and threshing circles this is done with craft and fine art. At any rate she got the light and after two puffs establishing proper combustion, she asked:

"How did you strike that match?"

"On my pants," I replied.

I felt the creep of a blush. Not that I had lighted her cigarette, but that I had said pants when I should have said trousers.

"On your pants," she repeated, emphasizing my garment misnomer. "How very ingenious. I never tried that. That will be a new trick for the girls at school."

Then in complacent mood she turned the subject. She asked me if I did not get rather lonesome where there was so much quiet all the time. I was pleased to return a few words with her, so I stood steadfast for the placid and the tranquil. I informed her that there was too much excitement in the world to-day, and that calmness and repose were needed. If there is to be any thinking, there must be peace.

"Why should you want to think," she argued, "when out here there is no one to tell it to after you have thought it all out?"

She was entertaining with further observation, and in the midst of which the young man came out and got into the car.

He thanked me and she bade me good-by, and she smiled again to me as she drove rapidly away.

As I walked back toward the depot I noted that the buildings looked a bit dingy and mean. And Lone Oak was lonesome, that is a fact. How apparent all this was. How strange I had not thought of it until a lone word from a little lady had given me the light to see the prospect about me.

I went on into my office, put the official guide in its place, and sat down at my desk. My mind was still on the pair. I wondered who they were, where they were going, why they had stopped to consult the official guide.

Then, s u d d e n and shuddering thought, could they be the young man and woman who had robbed the Paris Crossing bank that same morning? The thought gave me a shock. I sat bolt upright in my chair and a goose flesh quiver went down my spine. Then I saw something. The money drawer under the ticket window was open. I gave a hasty inspection. I carried the company's funds in a small sack or bag. Every morning I placed the bag in the drawer for handy use and it was gone. The amount contained was only thirty-six dollars, the previous day's receipts. Nevertheless, small as it was, I had been robbed!

There was nothing spectacular or hair-raising about this holdup. In fact, it had been pulled with class and polish. By her arts she had held me outside while he explored the inside. That was refined and polished burglary, but the sweat I exuded was as copious and cold as if a sawed-off gun had been used on me in the performance. I probably turned white, there were no witnesses. I found myself trembling, so I sat down for the moment.

What should be done?

I was in too much of a flutter to think clearly. I sat for a moment to calm down for better coördination. My first born thought was to personally make good the loss and give the affair no further publicity at all. The reason for this was that I, personally, was conscious of playing a stupid part in what had occurred. Slowly I began to think.

The robber had appeared at my office window. Then he came on into my office with the pretext of using my desk. Then he sat down in my office chair. Then he had me go out to tell his accomplice that he would shortly join her. By thus absenting myself I had obligingly handed over to him everything in the office that was loose and of value.

Why did I get up and run out to tell the young lady that the master would soon appear? What alchemy of authority was it that turned free-born Luther Leghorn into a man servant for a sporting, wayfaring youth? Why and how did I get that way? Bear with me if I stress this feature. It irritates me, yea, it inflames me. It deeply wounds my vanity to think how simple-minded I was to have been such an easy accomplice to my own robbery. I was good and sore at one Luther Leghorn. I applied to his shivering, slinking hide in high and hot spirit, all the berating words my tongue commanded. I subdued and humiliated him to the last milksop degree. Then suddenly out of his abasement came a spark of resistance. It came, as always, from the very ashes.

"Am I going to sit here like a dub and let those amateur crooks get away with this job?"

Something within shouted *No*. Whereupon I jumped up and ran out to look down the road in the direction the pair had taken. There was not even a mist of dust along the highway to tell that they had passed that way.

III

I HURRIED back into the office and told the dispatcher of the robbery, and asked that the company's police come to Lone Oak at once. Then Bascomb of the general store phoned for me the authorities of surrounding towns. We did all this hurriedly. At the garage I found Ike Shirk, constable of the township. Here was a *bona-fide* official, a man endowed with the legal authority to halt and arrest. It was a rare piece of luck that he was instantly

available. Isaac's first impulse was for caution, but I hurried him into it.

Bascomb came out of his store with an old double-barreled shotgun which he thrust into Isaac's rather reluctant hands.

"If you get close enough, give 'em both barrels," urged Bascomb. "You got the law for it. It's time something was done to put a stop to all this holdup stuff. Nobody's safe anywhere any more."

Thus urged on by our honest yeomanry we found the only conveyance in sight. It was a lone Lizzie parked in front of the store. We commandeered it without any words of explanation, and Isaac and I shot forth in pursuit of the robbers.

"I'M CLAIMIN' THE THOUSAND DOLLARS REWARD, UNDERSTAND?"

"They've got a good start on us, and they've got a fast car," said Isaac. "These desperadoes don't ride around in slow cars. But if anything would happen 'em, like blowin' a tire or running out of gas, or if they'd haft to detour or sumthin', we might get up along with 'em. What reward is the company offerin' for 'em?"

I informed Isaac that the company had not made any reward.

"A thousand dollars, do you think, maybe?" queried Isaac hopefully.

"No, no," I said. "Let's get 'em first. That is all we got to think of now. It is to get 'em. There is nothing else to think of."

"When you go after bandits, you are riskin' your life," persisted Isaac. "It's worth a thousand. Not a cent less."

For a moment it looked that Constable Isaac, duly elected, authorized and fully pledged to support the nation's laws, was on the point of demanding specific reward before proceeding further in upholding the Constitution.

"Five hundred would be little enough," Isaac went on. "Two hundred ain't much. One hundred ain't nothin'." Isaac reached the vanishing point with an expression of disgust, and with a rising voice to emphasize the contempt he held for any corporation holding for niggardly rewards for such perilous service.

I drove the car. Unfortunately it was of an ancient type. Its fenders were loose, its tonneau was in the rheumatic stage, and no one had ever tightened a bolt. It had all the noises there are from deep thunder to the click of broken china. I stepped on the gas and leaned over the wheel.

Far behind us over the highway we hung a heavy cloud of limestone dust. The noise indicated we were hurtling through space with speedway velocity. We had no speedometer, so we shall never know. We covered the first three miles in—but we had no time-piece, so we shall not make any record of that.

"HOW VERY INGENIOUS. I NEVER TRIED THAT"

Isaac, too, leaned forward. He was likewise tense. Look on us and our outfit in pursuit of the banditti. There we see represented the symbolic figures of "Justice Hot-footing Crime." Our artist has made feeble effort to immortalize the conception. It is an epic production of the type of the "Spirit of '76" act.

After the third mile the car began to show signs of fatigue. There came certain ominous sputterings and missings. Combustion was going wrong. We sensed trouble. There came some hay fever sneezes, then the asthmatic wheeze, then the consumptive cough. With these internal complications we came to a dead stop. Our Lizzie had abandoned the chase.

Constable Isaac, well shaken, but with rheumatic caution, crawled out and looked the car over. I followed him. We were out of gas

"Well," pondered Isaac, "it looks like we ain't going much further. And lookee here," he went on, holding up for my inspection an unhinged gun. "Ain't a shell in her. If we'd 'a' caught up with 'em, we would have had to argue with them and 'a' coaxed 'em to go back with us. Couldn't 'a' fired a shot, by Criminy. Here we was sailing out after bandits and with nary a load in our gun"

I had to confess that it looked like a poorly equipped and rather ill-provisioned criminal tracking outfit.

So we hung around for a time until it was determined that Isaac was to go to some near-by farmhouse for a sufficient supply of gasoline to get the car back to town. I was to hail a passing auto and go in on the first one to answer my signal. Naturally it followed that Isaac was a disappointed official. He was now keen to run the robbers down and shoot them up. He was disappointed, but vociferous. He was really clamorous for slaughter and carnage. Restraint and distance add wonderfully to our heroics.

When I got back to the office I was informed by the dispatcher that Officers Strahle and Sterenberg were driving to Lone Oak. They should reach there in due time and to look out for them.

The movements in the events narrated had been rapid. I did not see that I could do anything more. I had promptly notified surrounding towns. That might bring some result. My own bold chase with Constable Swift had enough of the opera bouffe in it to make me laugh. I tried to do some office work, but I was shaking and nothing my pen and pencil attempted went well.

IV

I HAD been in my office an hour or so when in rushed Constable Isaac. He was in a state of almost breathless agitation.

"I've run 'em down," he cried, dropping into the first chair for support. "I've got 'em spotted. We don't need to be in any rush. I can lay my hands on 'em any time.

"When I was puttin' gas in the Lizzie, who should come along but a sport roadster like you described. Who should be in it but the young man and the young girl just like you explained. If I'd 'a' had any shells I'd 'a' made 'em stop. There was another young man in with 'em. Who do you think it was? Why, Bill Baxter. Yes, sir, Bill Baxter hisself. Think of that Bill Baxter joining up with thieves and murderers. Who'd 'a' thought that? What's the country comin' to? I jumped in the Lizzie and went after 'em. They turned in at Baxter's country home. I stopped at the gate like something was wrong with my car. It wasn't long until the gardener come close enough to me for me to ask him a few questions."

"'That was a nice car them young people drove in here just now,' I ses, like I was admiring the car.

"'Uh-huh,' ses he.

"'Who are they?' ses I.

"'Who are who?' ses he.

"'Them young people,' ses I.

"'Bill,' ses he, short like.

"'But the young people with Bill,' ses I.

"'Oh,' ses he, 'them's college students visitin' Bill.'

"I didn't say no more. I could have gone right up and took 'em, but I had no shells. They are stayin' at Baxters, so we just as good as got 'em. We can lay our hands on 'em any minute. How's that for good detective work?"

Constable Isaac stopped for breath and for some word of praise for his enterprise and daring. I assured him that old Sherlock himself in his best days could not have done better.

So they were staying at Baxter's. Friends of Bill Baxter, my good friend. Prospects of complications loomed ahead.

It was not long until Captain Strahle and Lieutenant Sterenberg, the company's policemen, came driving in.

Captain Strahle questioned me pretty closely, but could reach no other conclusion than that the dapper young man had taken the money. He had me call Bill Baxter on the phone and make an appointment with him to meet the two company men who wanted to see him on a matter of personal interest to them.

"OK," responded Bill. "I am right here. Tell them to drive out."

Officer Strahle was not particularly excited over the situation, and seemed to think there was some question in fixing any tangible evidence of guilt.

"This is the first station robbery we have had for a long time," he observed. "Bandits are going after heavier stakes. It is the banks now instead of railroads. They are hitting the banks hard, particularly the small ones in country towns."

"Don't any one forget," interposed Constable Isaac, "that I found 'em, and that I run 'em down. I'm claimin' the thousand dollars reward. I want all of you to understand."

"I did not know that any reward had been offered," said Strahle. "This is a very small job. Anyway, you deserve credit for covering them as you did. That was very good work."

Isaac brightened up at these words of praise from a real officer. It was next to a money reward

"You may go with us; we may want you," Strahle said to me. Then addressing Isaac, he added: "We will see you when we get back."

I was in my shirt sleeves. Captain Strahle sent me back to the office for my coat.

"It is this way," he explained, as I rejoined them, "we may be invited inside, and we may meet others. It is a little more refined to appear in a coat."

In the act of stepping into the car, I slipped my coat on and gave a few movements of adjustment.

"What is the sack in your coat pocket?" asked Strahle.

I pulled it forth.

"It's my money bag," I exclaimed. "What the— How the—" I could not get out anything more lucid than that. So I stared at the bag in speechless bewilderment.

"Count the money."

"It is all there," I announced after a hasty and shaky inventory.

"Nothing else missing?"

"Nothing else."

"We are headed for home," said Strahle. "Call the office and tell them we will be right in. Call Baxter's appointment off in the best way you can."

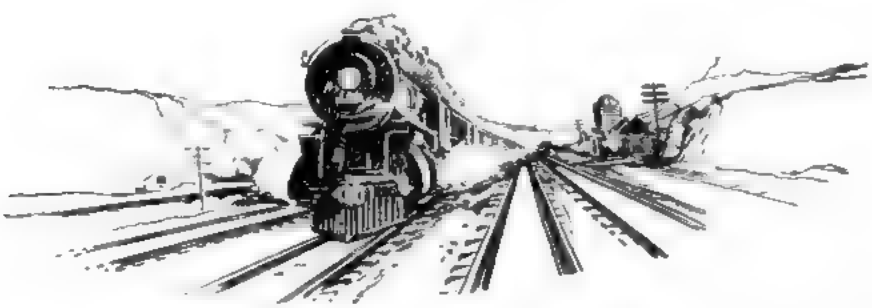
"Ain't you goin' with 'em?" asked Constable Isaac as they drove off.

"Nope, it's all off," I said. "My mistake. There wasn't any robbery at all."

"Ain't no reward?" shouted Isaac.

"Nothing doing," said I. "Try and forget it, Isaac. Anyway, you showed your stuff."

The whole thing was that I had forgotten in the morning to put the money sack into the drawer as I had always done before. Somehow things are not going well with me as agent in Lone Oak. Some time I think the stars were not in proper conjunction when I was born. When the next street fair or carnival comes close enough for me to go to it, I am going to consult a soothsayer or astrologer. I am going to have a reading and a forecast, by heck.



DON T TRY TO KID A DYIN' MAN "BO"

That Speck o' Human

Fate and a Hobo's Dog Took a Hand When the Guns Blazed on the Right of Way

By Joe Bledsoe

SIGHT of a brick-red head that raked their memory like a heated wire jolted Skimp and his dog to a sudden halt as they topped the fill. Skimp drew in his breath and swore. Fudge growled deep in his throat and tried to look fierce. To top things off, Redhead had grown to the ground squarely in front of the only empty in the whole string of box cars with its door invitingly ajar.

Skimp hated them all, from president of the road down to call boy. Four years of almost constant warfare with their kind had caused that; but Redhead yonder easily topped the list. A month is all too short a time in which to forget some things, and a soulless train shack who wielded a wicked pick handle halfway between two distant stations was one.

All this had happened to Skimp and his dog on their way North. As the pair had thrown out their feet a few inches in advance of the menacing sap, Skimp had shaken a grimed fist at the grinning shack and threatened dire

things. One of his threats was that some day he would ride his persecutor's train from one end of the division to the other.

And now that the need for this very thing had become imperative, Skimp faced the problem of making his threat good. Down the mysterious news lane of hobodom had come word that his old father was sick, and had called for him. Down in the jungle by the creek, Skimp had handed the mulligan ladle over to another and whistled to his dog; but right at the outset, with the need of haste strong upon them, they had run into this human snag

Skimp shifted to the other foot and pulled Fudge's lopping ears—a habit of his when under mental stress. Fudge whined his usual protest and pretended to devour his master's hand in mock savagery.

As the pair stood thus, it was a toss-up to determine which showed stronger evidence of "the road." Skimp was lost in the hit-and-miss assortment of raiment that adorned his gaunt frame Black, rusty pants, reefed in at the waist with binding twine, barely captured the tail of an old gray shirt, which showed no signs of a late boil up. His hat was just something to put on. Mostly he wore it with the gone part in front; but upon those rare occasions when he hit the rods he screwed it around with the brim to the fore. Under its fuzz his face showed young, and just now decidedly grim.

Fudge belonged to the common or garden variety of dog. He was the color of a faded mop, and his long, coarse hair was dusty and cinder-scorched; but from under their hairy fringe his eyes looked out upon the world with a sort of trustful appeal which the hard life of the road hadn't yet dimmed.

Sprawled along the track just behind them was the little town of Milton, fringed at the lower end by a cottonwood grove wherein lay the jungle. Out beyond this stretched an expansive jumble of farm and grass land, still sizzling under the heat of an hour-high sun.

Alone, even with the whole train crew "on" him, that three hundred odd miles to Harper would have been easy pickings for Skimp; but Fudge had not yet learned to "deck" a passenger coach or "nail" the rods, and down through the haunts of hobo land man and dog had come to be inseparable.

The engine barked a signal and shunted ahead. Fudge wiggled and tugged at Skimp's sleeve; but Skimp stood still, with his eyes glued on the red-headed shack. The shack wasn't yet aware of their presence. Perhaps he would swing through to the other side; but no—he stayed put. Skimp paused for certain hostile gestures toward the red-headed one and then, with his dog at his side, dived over the fill.

They came up again a hundred yards farther down and made an angling run for the moving box car. An irate yell from the caboose steps split Skimp's ears as he swung aboard. He secured his balance just in time to break Fudge's leap, and the two celebrated with aimless pawings at each other; but Skimp's joy was dimmed by the yell that still rang in his ears. In it was a triumphant note of savage anticipation, which stabbed him with the memory of descending pick handles and barren, desolate stretches of ties.

In one end of their Pullman was a litter of empty fruit boxes. A bit grimly, Skimp dragged one of these over to the door and sat down. A cool-

ing draft sucked in, and from the direction of the receding cottonwood clump came the odor of stewing wild plums; but Skimp remained glum.

When his practiced ear caught the tramp of feet overhead, he pushed Fudge behind him and glanced expectantly upward. Just then Redhead swung down and in. Skimp smothered a spark of admiration for the ease with which he did it. Almost before he lit, the shack jerked the pick handle from a leg of his pants.

They glared at each other. The trainman spoke first.

"Yuh got a hell of a lot o' nerve, after what happened before!"

Skimp's jaw set.

"My ole man's goin' to pass out. Got to git to Harper fast as this string o' junk 'll take me."

"Yeah! When a 'bo can't think up a better one than that, it's time to quit. Throw out your hoofs, jasper!"

II

Skimp coolly gauged the speed of the train through the open door, and sat still.

"Might as well die in here as out there," he told the shack calmly.

Redhead swelled, and the pick handle swung aloft; but, suddenly changing his mind, he checked its descent, while he glared at Fudge. Behind his master Fudge had sat up with dangling front paws, staring dolefully at the burly trainman.

"Got the pooch trained to beg off for ye, huh?" snorted the shack contemptuously.

"What's he doin'?" asked Skimp, with a glance behind.

"Jest like yuh don't know," glowered Redhead; "but it ain't goin' to git yuh by on this train. I ain't as soft as some!"

Skimp snickered.

"What's the big idea?" demanded the shack testily.

"'Bout a train shack bein' soft. There ain't a speck o' human in the rotten make-up of the whole damned lot!"

The shack's eyes blazed. He clutched his cudgel with a grip that suggested direful action; but instead of the swat he expected, Skimp felt the butt of the club pressed hard against his ragged chest.

"Listen, 'bo!" gritted Redhead, emphasizing his words with a push that almost upset Skimp. "In a couple more minutes we'll hit the up grade into Lawton. That's where yuh and this pot licker o' yours is goin' to throw 'em out, savvy? Reckon yuh ain't forgot what happened the last time yuh two bums tried to ride my train!"

"We wasn't goin' any place in particular then," defended Skimp; "but things is different now. Been tryin' to tell yuh all along that Fudge and me's on our way to the bedside of a pore ole sick man."

"Yeah!" snarled the shack menacingly. "Well, he ain't goin' to know yuh when yuh git there if yuh ain't off'n this train inside o' three minutes. Be ready to hit the ball o' mud when I tell yuh!"

Skimp stood up suddenly and pushed the pick handle to one side. A set, grim look shadowed the hostile glare of his slate-gray eyes.

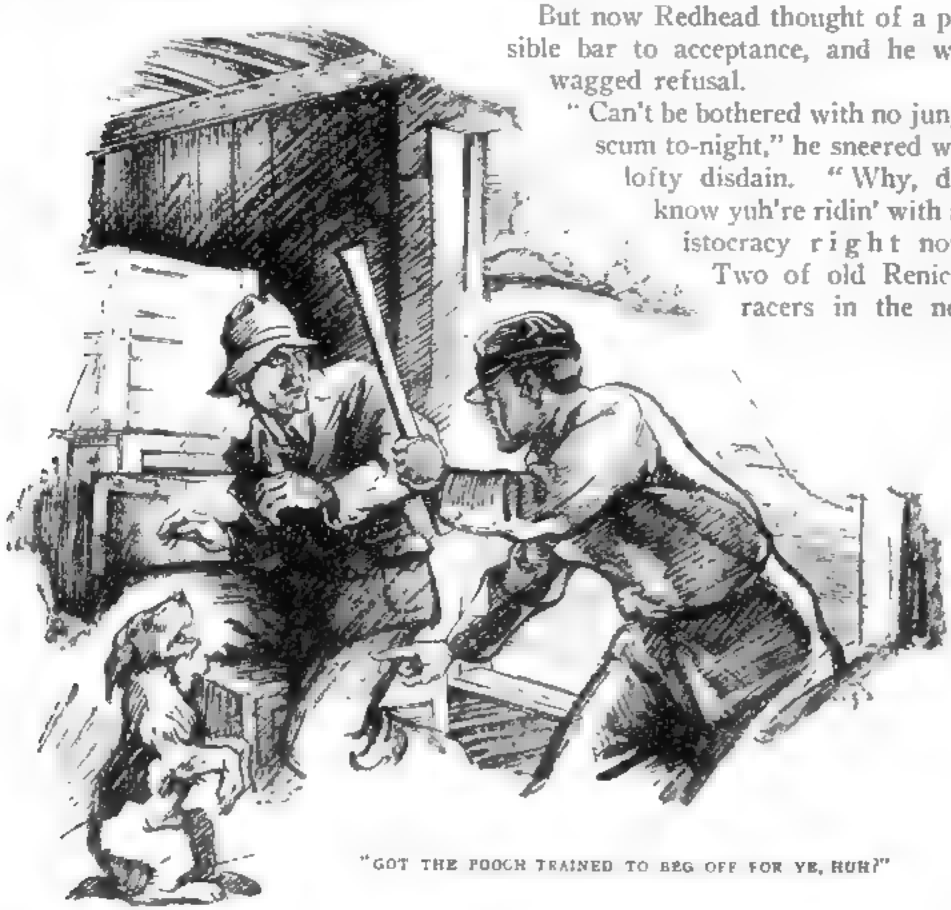
"It's the truth 'bout my ole man, Redhead. He's sick, maybe dyin'. He's been puttin' off an operation for years, for want of the money. He's down now, and he's callin' for me. That's why I'm headin' back. I'm merely tellin' yuh all this, hopin' it 'll help your dried-up brain to grasp the reason why I'm so hell-bent on ridin' this old scrap heap; but I ain't askin' no favors from

yuh. There's a way to settle this thing that 'll be fair to us both. Let's you and me git out on top of your old train, and if yuh can run me down, well and good. Yuh've made your brags, Redhead, that yuh can cover a train faster than any 'bo that ever grabbed the rods. If yuh git me cornered, I'll kick up the cinders if she's goin' forty per, I promise yuh that. Then yuh can come back here and dump Fudge off after me and ride on in peace. Yuh on?"

Redhead twirled his club in brief indecision. The grim challenge held a lure for him, for he was vastly proud of his reputation. Up and down the length of his division, and to far distant points beyond, his fame had spread. By jungle fires that had burned low, hobos with aching heads and blistered feet swore revenge, and hatched dark plots to outgeneral this monarch of the road.

But now Redhead thought of a possible bar to acceptance, and he wigwagged refusal.

"Can't be bothered with no jungle scum to-night," he sneered with lofty disdain. "Why, d'ye know yuh're ridin' with aristocracy right now? Two of old Renick's racers in the next car up, and old Renick himself back there in the caboose with the con. He's one o' the big boys of the racin' game, and we're takin' his two steppers through to the Clarkston fair for 'im. No, 'bo, any time yuh hook this rattler yuh're steppin' out o' your class, but yuh shore overdone it a plenty to-night. Heard what I said, didn't yuh, 'bout gittin' off? We're slowin' up for Lawton right now, and what I mean is yuh'd better *git off!*"



"GOT THE POOCH TRAINED TO BEG OFF FOR YE, HUH?"

Skimp got up and took a hitch in the belt line of his manifold trousers. Under its fuzz his hard, pinched face showed no disappointment.

"Knowed I had your kind pegged all the way," he said with an air of vast boredom. "Yuh're yeller, Redhead, like all the rest of 'em, that's what!"

A vicious jab in the short ribs from the pick handle aided Skimp to alight, and the shack's irate threat followed him to the cinders.

"Don't try any rock throwin', or I might use this." He yanked back his jumper and showed Skimp the gun above his hip. "We got orders to git plenty hard with yuh guys."

Skimp's lip curled as he waited for his dog. A few car lengths farther on the train jarred to a halt, and Fudge leaped out. Redhead followed him back up the track.

"Yuh know yuh was lyin' 'bout that ole man stuff," he flung at Skimp as he passed.

Skimp shrugged a lofty silence and turned away; but where the trail dipped over the fill to the jungles he faced about. Redhead was lost in the task of setting out cars farther up the track. Skimp spoke to his dog, and they veered back.

They made their Pullman again without detection; but Skimp's mind was still heavy with misgivings. Fudge read the signs. A bit reluctant, he snuggled close and offered his ears. After a particularly tough session his sacrifice had its reward. At last Skimp had conceived a plan.

He cleared a spot in a corner of the car and made Fudge lie down. Then he tossed empty boxes and rubbish recklessly about. Completely hidden behind the jumble, Fudge commenced to wriggle uneasily. Skimp wedged a bony hand through a crevice and patted his nose.

"'S all right, old-timer. Remember, no fuss when that shack comes around. We just got to ride this train through to Harper. It's for my ole man, savvy? Now, if that gorilla up the track had a speck o' human—but, hell, what's the use?"

Skimp swung out and under.

III

At the next stop Skimp had a bad half minute as the shack's feet crunched the cinders alongside the empty. Then came a satisfied grunt and the idle tap of the pick handle on the car floor, and Redhead moved on.

A grin cracked the grime on Skimp's pinched face.

"That's puttin' it over on 'im, old dawg!" he muttered proudly, as he pictured Fudge flattened behind his shelter. "That big bum 'll eat a handful of spikes when we show ourselves to 'im down the line at Carson. Too bad that's the end of his division! Seein' he's so accommodatin', I'd like to ride the other hundred and twenty miles to Harper with 'im."

Under the shelter of falling darkness Skimp felt the urge to move, and at a siding ten miles farther down he made the change. Out on top the air was cleaner. He stretched and rubbed his cinder-fretted eyes. Streaky moonlight showed him low, wooded hills on either side. He whistled softly as the freight roared on its way. Daylight ought to find them at the bedside of his old man.

Suddenly a shack's lantern bobbed up over the opposite end of the car, and a surprised yell warned Skimp that his catlike dive had been a split second too late. Redhead was on, likewise the big race.

The next half hour was fraught with action for Skimp. As many as a dozen times in that brief period he escaped the menacing pick handle by a hair. Redhead was relentless. Each time his elusive quarry outwitted him he took a fresh grip on his cudgel and carried on. Once or twice, when Skimp showed him a new trick, his hand shot to the bulge above his hip; but pride in his boast kept the gun undrawn.

Skimp covered the train from end to end like a circus monkey. Three fears, outstanding above the myriad of lesser ones, spurred him on. The country through which they were passing was wild and desolate, with towns few and far between; Redhead must be beaten if it cost a leg; and his old man was sick down in Harper, and had called for him. Yet, in spite of these incentives to his efforts, Redhead was constantly on top of him.

Short of breath, he crouched for a second on the front bumper of his empty and turned a fearful glance upward. Redhead's prying face blotted out the stars in grim pursuit; but a sudden jumble of whistle shrieks and screaming brakes checked the brakeman's triumphant swoop downward. Then, as the train jarred to a halt, a terrific din crashed out of the night alongside Skimp's perch.

Guns boomed and men yelled. By the stabbing spits of fire Skimp made out big-hatted horsemen milling about. He tried to figure it out as he flattened himself behind a car wheel. Then it came over him in one big flash—it was a gang of hill bandits after old Renick's famous horses! A shiver raked Skimp's spine as he remembered that the racers were in the car just ahead.

When the turmoil had subsided a pine torch flared guardedly.

"Git 'em all rounded up?" boomed a big voice, which seemed to be in command of ceremonies.

"That's what, boss," came the boastful reply. "Got five of 'em corralled up there back o' the caboose. We've combed 'er over from head to tail an' can't find no more. Had to tap the old stiff what's ridin' with the con on the conk afore he'd be good."

The big figure designated as "boss" guffawed.

"Right smart of a strain on him, I reckon! You boys sail in on that door, an' let's git it over with."

In the deep shadow of the car wheel Skimp made a mental count. Hog-head, taller-pot, two shacks, and the con, besides old Renick. Some one else had escaped the drag. He hoped it wasn't Redhead, the big bum!

Skimp grinned as he pictured the shack in line with his dukes aloft. He wished it had been Redhead, instead of old Renick, that the outlaw had smacked; but no danger of Redhead getting fussy with that gang, the big yellow stiff! He would rather wait for a chance to lam some harmless hobo over the bean with his pick handle. Leave it to a train shack always to play safe! There wasn't a speck of human in the rotten make-up of the whole damned lot.

Skimp flattened himself against the rail and peered out. He saw dim figures pounding away at the car door, while others stood by with a huge plank, ready to bridge the jump for the two famed racers. Frightened snorts from the horses reached him above the rest of the din.

Then Skimp heard something else—a dog's whine. He reared up like a startled turtle and butted his head violently against the car beam. Fudge was out there among the outlaws!

The whine came again, and Skimp glimpsed him dashing excitedly about, voicing keen disappointment at the absence of his master. The dog's quest brought him sniffing at the legs of the boss bandit. The burly figure lashed savagely out with his spurred boot, and Fudge went over and over.

Right on top of this a mingle of three different sounds split the night; but the heavy roar of the six-gun a few yards to Skimp's right took first place over his yell of rage and Fudge's pained yelp. In fact, it seemed almost to lift the car from over Skimp's head. He blinked, and the blink developed into a stare when he saw the outlaw whirl and pitch face first into the cinders.

The gun to his right spat again, and by its flash Skimp glimpsed the face behind it. Then he butted the car beam again. Redhead had opened on the bandits single-handed!

In a less tragic setting Skimp's look would have been ludicrous as he realized how he had misjudged the brakeman. He was still under the spell when Redhead's gun belched again, and its fourth flash showed him two dim figures instead of one. Fudge crouched close beside his grim champion.

Then a stream of lead poured under the car. Redhead grunted, and his gun banged down on the rail. As Skimp dived for it, the din from the direction of the caboose told him that the fight had become general.

This break of the trainmen discouraged the bandits. When they finally turned tail, Skimp dragged Redhead from under the car and loosened his shirt at the throat. Above them old Renick, big-hatted and big-hearted, extended a roll. With one motion the two on the ground pointed at each other.

"Me take it!" gasped Skimp. "Why me?"

"What about that ole man stuff yuh been tryin' to ride on?" flared Redhead, faint but grim. "Goin' to be contrary and let the old gink die?"

The bulge of long green came to rest in Skimp's fingers. He closed his claws over it tightly.

"If yuh feel thataway 'bout it, we'll split," he gabbled dumbly.

"Split nothin'!" Redhead's grin was a half sneer. "Don't try to kid a dyin' man, 'bo. I'm through!"

He choked, and Skimp lifted his head higher. When the spell passed he looked up.

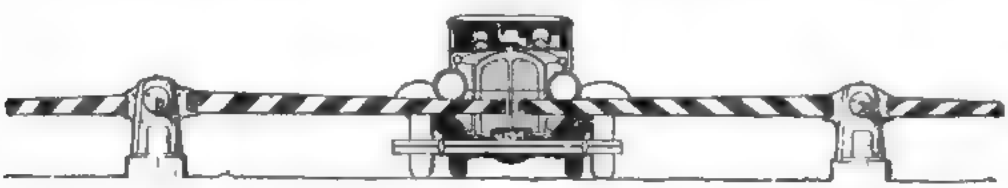
"Listen, 'bo!" A sudden light had propped his heavy eyes wide.

Skimp leaned closer.

"Yuh got to admit I had yuh all the way. If them bozos from the hills hadn't horned in, yuh'd 'a' been throwin' 'em out in about three shakes, yuh and that no good pooch o' yourn. That leaves the old slate clean!"

Then Skimp surprised himself.

"Yuh're right, Redhead," he lied in a loud, clear voice. "Yuh shore 'nuff had me. Yuh had me all the way."



JOE RESISTED AN IMPULSE TO DRIVE A COUPLE OF SHOTS AT THE PLACE WHERE SNEED CROUCHED

Blood and Steam

The Shadow of Terror Darkened the Yards and Marked Joe Allen for the Final Call

By Don Waters

WHAT HAS GONE BEFORE

JOE ALLEN, main line fireman and a product of the Blue Ridge mountain country, is on a yard job with Crab McAllister, hogger, when the two turn in an engine with a leaky throttle, and leave it to seek another. The leak allows enough steam to get into the cylinders to move the engine, and Joe, after a mad dash, catches it and prevents it from sideswiping the Blue Streak, crack passenger run of the road.

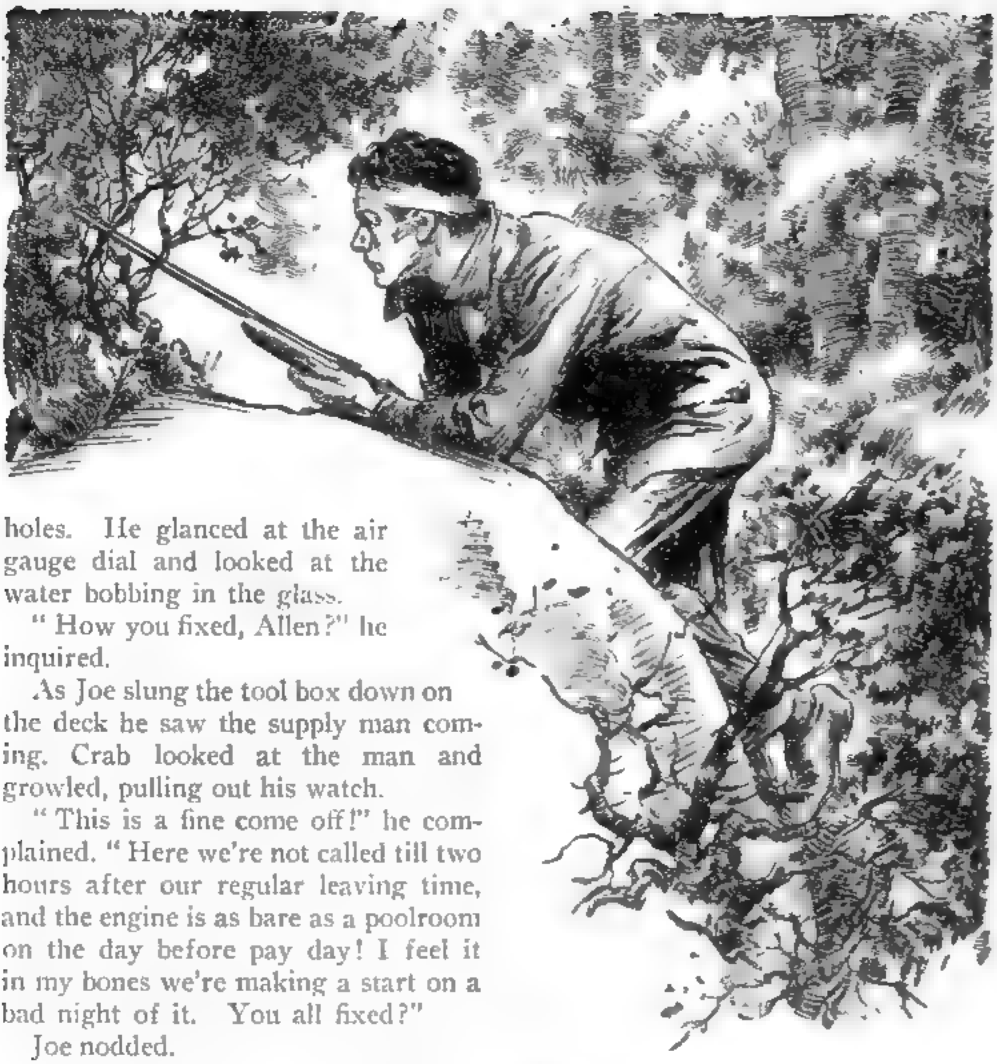
Joe and Crab are given a choice between thirty days off without pay or thirty days on the Slabtown local by the superintendent after Upson, the super's chief clerk, chimes in on the hearing. Jack Eagle, engineer of the Blue Streak, thanks Joe for his bravery in preventing the crash, and Joe has an opportunity to meet Jack's daughter, June, much to Upson's disgust

Joe then takes two days at home in the hills before reporting for the Slabtown and here he finds Sneed Cowsie, a mountain youth, stirring up an old family feud Joe's father tries to prevail on Joe to quit railroading, but Joe returns to work, only to find that a series of robberies have been started and evidence points to Cowsie. Belnap, special agent, cautions Joe to keep his eyes open and report anything suspicious on the run. Joe then meets the darkly handsome Mary Lee Cowsie in Slabtown

VIII

NEXT night the Slabtown crew were not called till after seven o'clock. When Joe Allen got over to the roundhouse he found No. 81 under the coal chute. She had no oil or engine supplies on her. Finding the supply man loafing in the sand shanty, he routed him out and sent him over to the oil house. He got Crab McAllister's tool box and lugged it over to the engine.

When he climbed aboard, Crab was standing on the seat box. The engineer switched on an electric light globe behind the feeder and watched the drops of oil feeding down through the sight



holes. He glanced at the air gauge dial and looked at the water bobbing in the glass.

"How you fixed, Allen?" he inquired.

As Joe slung the tool box down on the deck he saw the supply man coming. Crab looked at the man and growled, pulling out his watch.

"This is a fine come off!" he complained. "Here we're not called till two hours after our regular leaving time, and the engine is as bare as a poolroom on the day before pay day! I feel it in my bones we're making a start on a bad night of it. You all fixed?"

Joe nodded.

"Let's go to camp meeting," Crab muttered, reaching up for the throttle and whistle cord, as the supply man set the cans of engine and valve oil in the gangway.

Boot, boot, the whistle sounded. A hiss of steam shot out of the cylinder relief cocks, and the 81 moved out from the overhanging bins of the coal tipples. Joe tightened up his overall straps and looked ahead through the narrow window in the front cab door. A maze of switch lights dotted the glistening streaks of rails in front. Silhouetted in the hard glare of the electric headlight a switchman stood a few yards ahead, swinging a lantern.

"How they lined up?" Crab called.

Joe, who was familiar with the yards, shook his head.

"I can't tell what that fellow's trying to do. He's lining us up for the hump track."

Crab swore.

"I bet they ain't got our train made up," he growled. "We got to go down and switch her up ourselves, or wait

for one of them yard crews to do it for us. I got a small chance to beat it tonight! We're late now."

He slowed down as they came to the switch.

"Where you think you're sending us, fellow?" he yelled at the switchman.

"Go on down to the yard office and get 'em yourself!" the switchman yelled back. "Some of the boys'll help you down there. We ain't never lost a car yet, and we ain't never let an engine sneak away from us!"

Crab, in no easy humor, ran down to the yard office, where he and the conductor joined their voices in a chorus whose refrain was that they were being imposed upon and "weren't going to stand for it."

The empties for the Slabtown were slow in coming, however. Joe got his fire in shape, sat down on the steps of the yard office, a few feet away from where the 81 stood, and watched the hump riders sorting out a string of cars.

Although he had seen them shunting cars over the hump many times, it always fascinated him.

The switch engine at the back end grunted heavily, *chow, chow, chow,* working the train up on the rise that led down from the hump. As each car topped it a man would glance at the card on the side and another, with brake stick and lantern, would swarm up the side ladder. Then, gathering momentum, the car would slide down through the yards, which spread fanwise, switch on switch, from the narrow bottle neck of the hump.

Joe looked up as a yellow Fruit Growers' Dispatch topped the rise in front of him, passing through the little blob of light from the yard checker's window. It swept through his mind that that car was from the far-off orange groves of California. Another passed, a C. N. It had known the calm, still cold of forty below, the howl of the wolf, the thick snow blanket on the Canadian prairies. Another swept over the hump—an I.C., an Illinois Central box car, with a yellow line streaked six inches under its eaves. That car had stood submerged almost to its roof in muddy flood waters somewhere along the Mississippi valley.

One after another they topped the hump, these travelers from far places—topped the hump and rolled past. A Denver and Rio Grande, which had been through the snowsheds and across the high, bare ridges of the Rockies, was followed by a New York Central that had probably seen the teeming metropolis of America. A Chicago, Rock Island and Texas Pacific, which had rattled across the dusty deserts of the Lone Star State, ran by quickly just ten feet ahead of a coal car from the mines of Pennsylvania.

As Joe watched them pass the fascination of railroading recurred to him. To move the goods of all the wide continent, to carry the cotton of Georgia to the mills of New England, the coal of the Keystone State to the factories of Detroit, the timber of Oregon to the treeless plains of Kansas—the exchange of men's labor, the marketing of essential commodities—the railroads were the lifeblood of the nation. There was romance indeed in these running cars, the romance of trade and commerce.

And then something occurred to break the spell that held him. Right below him a switchman was standing, with one hand on the switch lever, routing the cars. Joe heard the yard foreman at the top of a hump call:

"Four!"

The switchman threw the switch. The car swerved off. Joe idly watched it as it passed, and saw another switch turn down below. The car ambled off to another track. He noticed that it passed Track Four, continued on, and ran down to Track Eight. He could see it passing through the circle of light under each electric yard lamp. There was something wrong there!

He rose and grasped the switchman by the arm.

"Say, you made a mistake! That last car was billed for Track Four. It's going down on Eight, on the rip track. I noticed it go by. It had no bad order tags on it. It was carded a red-baller for a fast freight. It must have been billed for No. 71, that's making up now."

The man turned, an angry expression on his face.

"Aw, take a walk, fellow, take a walk!" he said.

In the light cast from the lantern hanging over the switchman's arm, Joe noticed that the man seemed nervous. He also noticed the slinking, hang-dog look in his eyes and the smell of whisky strong on his breath.

"But I know it's gone wrong," Joe persisted.

He started to take a few steps toward the yard gang foreman. The man at the switch grabbed him by the shoulder.

"Aw, forget it!" he snarled.

Then he swung around, grabbed the side ladder of a passing car, and was whisked away, leaving his lantern and brake stick on the ground.

For a few seconds Joe stood dumfounded. Then he realized that it was no accident which had sent that car down upon the rip track. There was something going on to-night, and he would find out what it was. He knew it would be some time before his train was made up, for the switch engine working this train would finish it up before they made up the half dozen empties for the Slabtown local.

The switch engine kicked another load over the hump. Joe heard the yard foreman call:

"Seven!"

"Got her!" he shouted back.

Then, picking up the brake stick and lantern, he caught the grab irons when the box car drove past him and slung himself up the side ladder. Down through the yard the car careened. As he approached the men at the switches below the hump he yelled:

"Seven!"

They lined the rails up for him, and with increasing speed the car rumbled down through the yard. He looked across to where the black bulk of a string of cars stood on Track Eight. He picked up his own lantern, raised it, and jerked it abruptly. The light went out. He racked his brake stick through the spokes of the brake wheel, heeled the pawl, and hauled the hand brakes up tight. Then, feeling the car lose speed, he clambered down the side ladder quickly and, with a swing and a flip, slung himself off.

As he checked his momentum he looked ahead and fancied that he saw the momentary flare of a light from a car a hundred yards in front on Track Eight—just a sudden brief illumination, as if a flash light had been snapped on and off. Quietly, his feet making no sound on the hard-packed cinders, Joe went rapidly along.

He heard a voice, muffled and guarded, mutter:

"It's all right. The shack that came down on Seven must 'a' unloaded and let her slide. He's gone back."

A sharp click sounded, then a

scrunching, complaining grind, as if a door was being pried open. Then Joe was certain of what was going on. This was the gang who had been robbing cars. They were at their work now.

He wished he had not been so impulsive. He ought to have stopped at the yard office and informed some one there of his suspicions, instead of riding down here alone. A desperate crew this! There was no telling what they would do.

A little shiver of apprehension ran up and down his spine. This brake stick he carried, what a futile weapon it was against a gun! And, no doubt, those fellows had guns. How easy it would be for him to sneak out of this—to go back to the yard office and get some help, or telephone Belnap! Yes, let the special agent handle it!

As these thoughts swept through Joe's mind, he saw a man in a sudden circle of light beside the open box car door. Just a brief flash from a light, a split second's illumination, centered that figure. In that instant, however, Joe was certain that he had seen the man before. There was a familiar stoop to his shoulders, a recognizable set to his head, silhouetted against the background of the open door.

Joe's first fears were forgotten. Cautiously, one foot feeling before the other, he crept forward.

Then again came the glare of a flash light. He saw a man up in the open door of the car, another on the ground, and a case passing between the two. Their backs were turned toward him and he could not see their faces. Below, on the road, his eyes, now accustomed to the darkness, made out the vague outlines of a truck.

Joe threw all caution aside. In a few quick steps he was up to the car.

"What's this?" he yelled.

He was answered by a sudden startled oath, and by the hard, white glare of a flash light's beam flung in his face. The half seen countenance of the man opposite was dimly outlined in the light's reflection. He sensed, rather than heard, some one behind him. Involuntarily he dodged—too late. He felt the sharp blow of a club glance off the side of his head and land with a jarring impact on his left shoulder.

A spangle of stars danced before his eyes. A loud roaring filled his ears. His knees sagged, the brake stick fell from his hand, and he slumped to the ground, senseless.

IX

FAR-AWAY, monotonous, a series of sounds—*click, clack, click, clack, click, clack*—penetrated dimly into Joe Allen's consciousness. They grew louder, drew closer. He opened his eyes. Up above, the stars twinkled brightly. From beneath, the noise of wheels rapping the rail joints welled into an insistent chorus. He was lying on his back on the hard, uneven surface of a load of steel rails.

Raising his right arm, he felt a welt and a lump that burned on the side of his head. His fingers came away sticky. Slowly he sagged back, faint and dizzy from the pain in his head and shoulder.

A minute passed. From in front, *whoo, whoo, whoo, whooee,* the mournful sound of a crossing blow roused him. He raised himself on one elbow. Gradually his head cleared. He was in an open car on a train that was running fast.

Now he recalled and understood. They had knocked him down, carried him unconscious over to the freight train making up, and pitched him into

this gondola. They thought him dead, probably. It was a clever way to dispose of him.

He fell back, weak and trembling, sick from his hurts. Then, filled with anger at the cowardly way in which he had been struck down, Joe Allen gritted his teeth, grasped the edge of the car and drew himself up to a sitting position.

From far up in front a glare lit up the sky from the occasional opening of the door on the firebox of the engine. He looked back. The yellow marker lights on the caboose glimmered faintly from a long way to the rear. He was in the middle of a train, probably No. 71. He doubted his ability to make his way up to the engine over the tops, or back to the caboose.

WITH A STARTLED OATH THE HARD WHITE GLARE OF THE FLASH LIGHT'S BEAM WAS FLUNG IN HIS FACE

A signal tower came into view overhead, its green target showing a poisonous glare, like a serpent's eye. Five Mile Post—he recognized where he was. He knew they were on the main line, and that a mile beyond lay the little town of New Bridge. There was a station there. If he could get off—

Get off, but how? The freight was piling along, rocketing through the night at forty miles an hour. There were twenty or thirty cars ahead of him, flats and gondolas, box cars and coal cars, to clamber over. He knew that with his injured arm he could never make it. To go back to the caboose would be just as difficult.

Suddenly a solution came to him—to open the train line, set the brakes and stop No. 71 himself. But how?

The air hoses between the cars were the weak point. If he could disconnect one of them, the sudden application of the brakes, at the speed at which the train was running, might cause a wreck. He felt his knife in his pocket. Ah, here was a way! He would bleed the train line.

Painfully Joe climbed over the end of the car, straddled the end sills, reached down, and sawed at the air hose. A thin hiss answered his efforts as he cut through the tough rubber and braid—a hiss of escaping air that grew stronger as the cut widened. Presently there welled up a grating, grinding crunch of cast-iron brake shoes clamping hard on steel wheel treads. With a seventy-pound reduction of air shoving down the brake shoes on every truck from the engine clear back to the caboose the train rapidly slowed down.

Joe felt his way to the grab irons on the side of the car, reached down, placed his left foot on a journal box, swung himself ahead, snapped back suddenly, and slung himself off. His running feet spurned the ballast, he stumbled and fell forward with outstretched arms. Hitting full length, he rolled over and came to a stop just before the station platform at New Bridge.

His left arm hurt badly now, his hands were skinned, his clothes torn; but those things did not concern him as much as the sight of the darkened station. With a sickening sense of failure he saw that the building was closed and the operator had gone home.

He picked himself up as the caboose went squealing past. What now? For a few seconds he hesitated. Then he limped over to the big window in the front of the station. If what he had done was to count for anything he must lose no time.

Regardless of flying splinters, he pushed his elbow through the window. With a screaming crash of falling glass the wide pane caved in. Joe reached over and felt across the table. His fingers closed over a telephone. He lifted the receiver and heard a voice interrogate:

"Well?"

Without waiting to find out to whom he was speaking, in short, unformed sentences, a man gasping out a strange tale, fighting against time, he told his story. Grimly hanging on to the window sill, holding himself up, holding on to consciousness, he reported what had happened.

A great weariness came over him. A quarter of a mile down the track he could see the marker lights on the train that he had stopped. The train crew would put on a new air hose, and would continue their trip without knowing how the damaged pipe had been opened. As he looked the lights dimmed. He knew he was passing out. He scarcely heard the last of the answer:

"No. 40 will stop for you at New Bridge."

He slumped down, a limp bundle before the broken window, faint and dizzy from loss of blood. Then things went black, and his head sagged down.

Half an hour later No. 40, a passenger train, stopped at New Bridge with a screech of brakes. They found Joe sitting with his back against the wall, a slow trickle of blood dropping down the side of his face, his head on his chest, his legs aspraddle. He was unconscious.

At the terminal they rushed him from the baggage car into which he had been lifted on a stretcher to the hospital in an ambulance. The doctors found that his injury was not serious —just an abrasion and a badly bruised shoulder. Joe spent the night in the hospital and went down to the station in the morning, his arm in a sling, his head bandaged.

He was besieged with questions. Almost every railroad man he met on the street, when he went out for breakfast, stopped him and asked for details; but Joe had few to furnish. Later, up in the superintendent's office, where he told his tale to the special agent and the colonel, he was able to give them little information as to the number of men concerned in the robbery, or the identity of any of them. He kept to himself a vague and illusory suspicion that was forming in his mind. He had no desire to make any definite accusation with nothing more tangible to go upon than his momentary glimpse of the man before the car door last night.

During the conversation he learned that the thieves, whoever they might be, were not working upon any ill-conceived and hasty plan. The freight car they had opened had contained a valuable cargo of silk, and they had got away with a truck load in time to escape capture.

When the interview was over, Joe left the superintendent's office, where the two other men were sitting silent and studious. As he reached the door, Belnap spoke.

"Colonel," said the special agent, "this is getting pretty serious. Inside stuff!"

Joe heard no more.

He went over to the Y. M. C. A., where the secretary informed him that some one had called and left a telephone number. Joe called the number, and June Eagle's voice replied. In answer to her inquiries as to how he was, he told her:

"Oh, I reckon I'm all right, Miss June. Yeh, I got a lick last night. No, not too bad. Sure, I can eat," laughingly, "provided you don't have any tough meat that I have to cut up. I'm one-handed this morning."

She laughed in reply, and promised to arrange it.

"Even if I have to serve you soup alone," she explained.

Joe could scarcely wait for the rest of the day to pass, so impatient was he for six o'clock and dinner time to come. At ten minutes before the hour he turned up the street and climbed a slight grade to Jack Eagle's house.

He saw before him a low white cottage, surrounded by a hedge, and standing well back in a broad expanse of velvety lawn. The sun was setting and the high-piled clouds in the west were reflecting the golds and russets of a dying day, throwing a mellow glow over the home of the engineer. A wistaria vine spread up one side of the house, and its profusion of purple blossoms, tinged saffron in the fading light, stood out as if an artist had painted them against the white weather boards.

The stone chimney, ivy-covered, the window boxes filled with flowers, the well kept gravel path, bordered with rows of violets, showed that here was a

home that was loved and well cared for. Another picture flashed through Joe's mind—the picture of his own home, with never a drop of paint on its split log walls, nor a flower in the hard-packed clay of its door yard to relieve its barrenness. He hesitated for a moment, thinking of the difference between the two. Then, gathering courage, he opened the gate, walked up the path to the vine-covered porch, and, with a nervous hand, clicked the brass door knocker.

Steps sounded inside. Joe held his breath. Through his mind a riot of thoughts swept, trying to organize themselves. What would he say to June when she greeted him? How should he act? What—

The door opened. Joe held out his hand to a surprised colored woman, the maid, who was as much amazed as he at his action.

"Yassah, yassah, yo' is expected." She grinned broadly. "Come right in, sah. Lemme have yo' hat, sah. Miss June will be right out."

X

Joe sat down in an armchair and gazed around self-consciously. A couple of big bookcases flanked the stone fireplace on one side, and a piano stood against the opposite wall, with electric floor lamps on either side of it. On the walls were pictures in deep frames. A small table beside him was piled with books and magazines thrown down haphazard, as if some one had just been reading them.

Looking through the half opened doors of an inner room, he saw the dining table spread, its snowy white cover a background for the glitter of cut glass and burnished silverware. The scent of a big bowl full of lilacs in the center of the table filled both rooms with fragrance. The last rose color of the sunset shone through the windows and diffused a mellow tinge over the interior.

There was an air of comfort here. Things were neat and ordered. Jack Eagle's was a quiet, well arranged house, and, to Joe's unaccustomed eyes, it seemed almost like a fairy place compared to his own home, or to his bare, cheerless room at the Y. M. C. A.

He turned to glance at the long lines of books on the shelves beside him. Not one whose title he read was familiar to him. Row on row they stood, those messengers from other times and lands, those strangers, silent and still, yet with voices that had power to speak long after their authors were no more. Joe wanted to open that bookcase and look between those covers, for he sensed, rather than knew, that these were June's books. She had read them, and in that way she had gleaned knowledge beyond his ken.

A great longing for the things that lay beyond his horizon came over Joe Allen while he mentally noted the titles of those volumes. Some day he, too, would be a reader of books. Some day—

As June came softly in the room she saw him leaning over toward the books and saw the tense, studious expression in his eyes when he turned toward her. He stood up. A little jumping flutter was in her throat for a second, a film misted her eyes.

With a woman's quick perceptions, she saw many things. She studied the expression of his face, noticed the wide-set dark eyes, the high forehead, the square jaw, and the strong chin. His dark, curling hair above the bandage looked darker against the white material, and the tan of his forehead below it seemed deeper. Broad of

shoulder, deep-chested, Joe Allen was a man to catch any woman's eyes; but beyond the externals she caught a glimpse of the real Joe Allen who had been surveying the books, and she fathomed the deep abyss into which he was gazing.

There was a pause. Then June Eagle recovered herself.

"Good evening, Mr. Allen. How are you?" she said, holding out her hand.

Her eyes rested first on the bandage around his head, then on the sling.

"Oh, I'm so sorry you were hurt, and so glad it was no worse! Dad tells me"—she shuddered a little—"that you stood a good chance of being killed right there. I do hope they stop those men soon! No telling what they may do. How are you, anyway"—she hesitated, cast a glance at him from under her long lashes, then added softly—"Joe?"

That glance, the way she voiced his name, caused his heart to throb fast. Under the press of his feelings he unconsciously dropped back into the speech of the mountains.

"Oh, I'm sorter tolerable, Miss June," he answered. "How you makin' it?"

Her cool little ripple of laughter broke the strained pause that followed.

"Oh," she replied, "I'm making it fair to middlin', and am sorter so as to be about."

Joe, at his ease again, laughed at her ready knack of using the mountain dialect, and his cup of joy was filled when she invited him to stay for dinner. June was a wonderful girl. She had an education that he lacked. She spoke correctly and easily, never seeming at a loss for a word to express her thought. She had a poise and an assurance about her. She was so different from the mountain girls he knew that that very difference appealed to him. Her ways were the right ways; he determined to follow them and resolved to learn from her.

Jack Eagle came into the room.

"Heyho, Nervy!" he boomed genially.

Joe looked up, surprised.

"Nervy?" he repeated questioningly. "Where'd you get that?"

"You can't get away from it," replied Jack. "They've hung that moniker on you, and Nervy Joe Allen you'll be as long as you stay on the mountain division. How are you? Hurt much?"

Joe shook his bandaged head.

"Wait a minute, Jack, and let me think. Since I came into this house I've even forgotten I'd been hurt."

All three laughed as they sat down to the table. Glancing at June, Joe was quick to see that his words had not displeased her.

As the meal progressed, Joe's slight self-consciousness was forgotten. These two, father and daughter, were so thoroughly at ease, and the spirit between them was so comradely, that Joe soon felt as if he shared their comradeship. When June made some remark about the beauty of the mountains in the spring he agreed. He laid down his fork, and a far-away expression deepened on his face.

"It shore indeed is pretty out there in those hills," he said, again dropping into the mountain dialect, "when spring comes a flirtin' after the tail end of winter, when the violets and arbutus are nestlin' down in the clefts of the pine roots, peepin' out timid and shy through the dead leaves; when the horse chestnut buds begin to swell, and the pussy willows are all fluffed out along the crick bottoms; when the red-

birds streak through the brush like balls of fire, a huntin' a nestin' place. I used to go up to the gap, where I could see a right far piece, and look down on the dogwoods all a white popple against the dark green of the spruce pines. Off in the far distance I could see the smoky blue peaks, and I'd think, in the springtime, how all over the land there was growin' things, shovin', swellin', feelin' the life runnin' through 'em, all a comin' up; and I'd wonder how it all come, and why, and what made it.

"How did the bluebirds know when spring was comin', and what brought them back to the same place that they left when cold weather come on them last year? How did those long V's of ducks and geese, wingin' far overhead, know where they were goin'? How did the black bear find his mate, who mebbe was miles and miles away from where he had denned up to sleep for the winter? I see frog aigs and mud turtle aigs get caught in a shallow in the crick and freeze up solid overnight, come a late real cold spell. I see those same aigs thaw out in the sun and bust open, and live beasties come out. How come that? How come everything never misses any chance to grow, to come alive, to have little uns? The bear, he travels miles for his mate. Those frog aigs, they turn into pollywogs even after they've been froze. Those ducks and geese make that long trip so as to get back where they can nest and have young uns. The bluebirds, pair by pair, are flittin' around, gatherin' straws and soft fluffy things for to line a nest for their aigs. What makes 'em all do that way?"

Joe looked over at Jack Eagle, as if seeking an answer to his question. Jack shook his head.

"Joe, you're trying to fathom the unfathomable mystery of life. It's beyond me, and beyond many a smarter man than I am."

Joe Allen turned his questioning look on June, who also shook her head slowly.

"Don't ask me, Joe. It's beyond me, too. I've heard men who studied those things for years get up and lecture in the classroom. They would promulgate theories, postulate, deduct, and premise, and, Joe, when they got all through they were exactly in the same place you are. They didn't know. No man knows. Their why was just as good as yours, and no better. It's too deep for me. Come on, let's have some music. Let's eat, drink, and be merry, for to-morrow we die, and the deep problems of life will still be unsolved long after we are gone."

She led the way into the other room and sat down before the piano. To Joe, who watched her every movement, she seemed the very spirit of grace and loveliness. Her shapely hands moved lightly over the keys, and her voice, a rich, low contralto, filled the room with the memory stirring strains of "Long, Long Ago."

"'Oh, don't you remember the path where we met?'" she sang.

She half turned and looked at Joe, who was sitting behind her. Something in his expression caused her to falter in her song. Her voice trailed off into a low, vibrant—"'You told me you ne'er would forget!'" Then the music stopped.

"Do you sing?" she asked.

"Not like you do, Miss June," replied Joe. "I've never heard any one sing that way, except a mocking bird laying his song over the moonlight when the full moon is climbing over the tree tops on a warm spring evening, and when all the hills are

rippling silver and the valleys are blue-black and mysterious with shadows. You—"

He stopped abruptly at the rush of crimson that flooded her face. She caught a full breath and recovered herself

"Why, Joe Allen! That's the nicest thing I've ever heard any one say about me. Don't you sing? Come on let's have a duet. What shall I play?"

Joe stood up beside her.

"Can't you give us 'Sourwood Mountain,' or 'Bury Me 'Neath a Willow'? Or maybe you would try, 'Good-by, Little Bonnie Blue Eyes.'"

She shook her head

"I've never heard of them." She looked up at her father, who had just entered the room "Have you, dad?"

Jack Eagle nodded In a thoughtful, reminiscent tone he replied:

"I sure have. It's been three decades since then, but I've not forgotten. Come on, Joe—let's show her how they go:

"Oh, I got a hound, a maw, and a pap!
I got a gal down in Cumberland Gap!"

Joe caught his breath

"How come you can hit that off so well, after you haven't heard it for such a long time?" he asked.

Jack Eagle grinned.

"I'll tell you, Joe. I was born in a one-room log cabin, high up in the Blue Ridge. I can remember many a night, sitting before the fireplace, picking a banjo, my bare feet slapping time on the puncheon floor." He paused "That's long ago and far away, Joe I often wonder it I wouldn't have saved myself many a night's worry and many a day's trouble if I had stayed there."

HER HAIR BRUSHED HIS CHEEK HE FELT HIS HEART POUND HEAVY IN HIS BREAST. FELT A WARM FLOOD POUR OVER HIM

He laid his hand on Joe's shoulder.

"You've got a hard road before you, lad, and I wonder if it's worth the effort it takes to travel that road Education, position, property — all

those things bring their problems and tribulations, their worries and griefs, that I never dreamed of when I was your age. When I was your age, and was courting her—"

He inclined his head toward a picture in a frame on the wall. His voice was a bit husky when he said softly:

"June's mother, whom she never knew."

With an apparent effort, Jack composed himself.

"I haven't gone far," he added, after a pause, "but what little progress I've made has cost me a good deal."

At the time, Joe Allen did not catch the import of the engineer's words. The living, vital present was on him—that and the nearness of June Eagle. There was little space in his mind for other thoughts.

Once she came close to him as he leaned over the piano while she played, and a wisp of her hair brushed against his cheek. His heart pounded heavily in his breast, and he felt a delicious warm flood pour over him.

Presently she stopped playing, looked up at him, and asked:

"I suppose it will be quite a while before you get well enough to go back to your run?"

"I'm going back just as soon as the doctor will report me back to work," he replied; "but I sure would like to spend another evening with you before my Slabtown run takes my time from me again."

She nodded.

"Why, surely," she consented.

"Couldn't we"—he hesitated—"couldn't you and me go uptown to a show some night? To-morrow?"

He could feel his heart beating in the pause that followed his question.

"I'm afraid not to-morrow, Joe. You see, I"—she smiled at him—"but you call me the day after and I think we can arrange it."

As he walked down the hill, Joe's mind was filled with what he had seen and heard at the engineer's house. A home like that might be his some day, and he firmly resolved that it should. He had been on the railroad long enough to know that it was no easy thing to work up to the position of engineer on a first-class passenger train. Men came and went on the road. They learned to fire, bucked the extra board, worked their way through local and time freight, got jobs firing on passenger trains, accumulated "age," and, in six or eight years, or sometimes as long as ten years, were promoted to engineer. Then again they started up through the lesser runs—ditcher and work train, local and way freight, time freight, and red-ballers. The hazards of the road eliminated them one by one. Joe had read somewhere that out of ten thousand men who start in to learn the road, to work at firing, only one will ever be engineer on a first-class passenger train.

Yet he made up his mind, as he walked down the street from June Eagle's house, that some day he would be engineer on the crack train of the division; that some day he would pull the throttle and fist the brake valve on the locomotive hauling the Blue Streak. Ahead of him lay a hard struggle for attainment, he realized, just as Jack Eagle had said; but he looked forward to that struggle with the eagerness of youth.

When he went into the Y. M. C. A., he saw a lone figure sitting in a chair in the lobby, whom he recognized as tall, stoop-shouldered Gene Hazlitt, their nearest neighbor at Glen Cove. Gene stood up and came toward Joe.

By the expression on the man's face, Joe could see that something had gone wrong.

"Howdy, Gene?" he said. "What brings you here?"

With maddening deliberation Gene shifted his cud to his other cheek and looked helplessly around, searching for a place to spit. Failing in his quest, he walked to the door. He came back.

"I bin waitin' yere nigh on two hour fur ye, Joey. I reckon ye'd better be a comin' out home as soon as ye kin."

"What? Why am I needed at home?"

Finally, after a long pause, Gene Hazlitt drawled:

"Yore pap done got hisself shot."

XI

Joe stood dumfounded for a minute at the shock of the news. Then he found his voice.

"Sneed Cowsie done it! That there skunk of a Sneed Cowsie, damn him for it! He's the one!" Joe's voice rose sudden, high-pitched, angry. "He'll pay, he'll pay! Gene Hazlitt, ye hear me!" His voice broke. There was a sob in it when he asked haltingly: "Pap, my pap, is—is he—"

His hopes arose at the answer to his unfinished question.

"No, he's a restin' easy. The bullet done sorter ranged along his shoulder an' come out in back 'fore hit split up. Hit missed airy bones. Yore pap 'll be all right arter a while, but he's sorter out o' kilter now."

Joe breathed a sigh of relief.

"O' course, Joey, seein' as how yore pap is, he 'lowed ye'd want to come home at wunst, an' sorter git things straightened out."

There was no hesitation in Joe's reply.

"Of course I'll go. It's my place. There's no one else." Sternly he repeated: "'An eye for an eye and a tooth for a tooth!'"

He hurried to the street, Gene following close behind. They crossed the yards, and Joe, half running, went into the roundhouse and looked over the board. A freight train was marked up for midnight on the cut-off run. It would get to Glen Cove before daylight. Joe knew the engine crew, and knew that he would have no trouble in riding out on that train. A few minutes later he crossed the tracks and found the engineer.

"Sure, Nervy, I'll fix it for you to ride the shanty. Hey, Sam!" he called to the conductor. "These guys want to make a quick run to Glen Cove. Fix 'em up on the cushions. They're friends of mine."

Ten minutes later the freight was under way, the caboose clattering over the yard switches. A quarter of an hour afterward it turned into the Glen Cove cut-off and rattled along through the darkness. Joe sat hunched up on a cushion, silently thinking. While the freight drove along through the night, he fought out his bitter fight.

All his plans for the future had gone agley. He was a mountaineer now, and the code of the hills was reborn in him. Blood had been spilled, and only blood could even the score.

A dull ache of moodiness enveloped him as the freight hauled along, rattling fast over the rail joints, whipping around the curves, rumbling across the trestles. This thing that he had set out to do, where would it lead? What would the result be? He would kill Sneed Cowsie—of that he had no doubt; but what then?

His job on the railroad would be gone. He would take to the hills, and the Cowsies would be after him. They

would hunt him as if he were a wild animal. He would have to dodge from one hiding place to another. He would live as he could, win clear of the mountains, go away somewhere, and make a new start under an assumed name. The prospect was indeed disheartening, yet he saw no way out. It was his duty to take up his father's quarrel, and he would do it to the best of his ability.

The thought persisted in his mind, why had Sneed Cowsie done this? What motive lay behind it? Why should Sneed want to drive Calvin Allen away? Why should he want their place?

Sneed was no farmer. A lazy, worthless loafer, always in trouble, he had been in a dozen liquor scrapes and on the chain gang several times. A slinking, hangdog creature, whose methods had always been those of stealth and deception, how had he suddenly gained courage to lift a rifle against Calvin Allen? There was something more behind this than a mere personal grudge. What could it be? Joe determined to find out.

He felt the train slacken speed. The conductor called down from the cupola above:

"All right, Nervy, we're at the Glen Cove water tank. So long! See you later."

Joe rose and went out on the back platform as the train slowed down.

"Wall, yere we be, Joey," said Gene Hazlitt, speaking for the first time since leaving the terminal. Just as the train came to a stop he grabbed Joe's arm. "Good luck to ye! Yere's hopin' ye do what ye've set out to do, an' —an'—be keerful, Joey, an' don't mention me in hit no way howsomever."

Joe nodded.

"Don't worry, Gene. I'm obliged to you for coming in and telling me. I'll never say a word to any one about it."

He swung himself off the caboose. Up in the cupola the conductor slid open a window and waved a lantern. *Boot, boot,* the answering signal drifted back from the locomotive. *Ca-chow, ca-chow,* her exhaust increased its tempo. The red marker lights on the caboose moved away and winked out around the curve ahead. The darkness pressed down, the sound of the freight became muffled, grew fainter.

Joe turned to where Gene Hazlitt had been standing beside him, but Gene was gone. Smiling a grim, mirthless smile, Joe walked slowly up the tracks, climbed a stake and rider fence, mounted a steep hill, and followed a familiar path down into the hollow behind it. A ringing medley of deep-voiced hounds bayed inquiringly at him, and then, when he drew nearer, they yelped noisily in recognition. The door of his home stood open, the light of a feeble yellow flame coming from the inside.

He walked quietly in. The dancing, flickering gleam of a pitch pine knot burning in the fireplace cast a weird, uncanny glow over the room. In one corner it showed the pallet on which Calvin Allen lay, his rifle leaning against the log wall of the cabin close to his hand. Joe's mother sat on a low stool beside her husband. She turned as her son came in.

"I heard the hounds a welcomin' ye, Joey. I 'lowed it war ye comin'. I knowed in reason ye'd be into this."

Something in her tone, a catch in her voice, the little loving, slurring way in which she had said his name, caused Joe to look quickly at his mother. The fire flared up, and a lump came into his throat when he saw the tears glistening on her cheeks.

"Were you hoping I'd come, maw?" he asked softly.

She glanced down at the sleeping figure of her husband before replying.

"Hopin' ye'd be man enough to come, an' prayin' ye'd have sense enough not to, Joey," she whispered. She noticed the bandage around his head, his left arm in a sling. "Oh, my boy, air ye hurt?" she cried.

"It's nothing," Joe replied carelessly. "Just a little bump I got."

He lifted the sling over his head, slipped it off his arm, and threw it into the fireplace. Calvin stirred and groaned, half raising himself up on one elbow. Opening his eyes, he saw his son.

"Wall, Joey, he got me," he began. "Sneed Cowsie, I mean. I war down near the big rock jest above Grassy Branch, huntin' my hawgs. All of a sudden I sees him riz up out'n a brier patch across the crick. Afore I could move, he done shot me. I drove one at him and sent his hat a spinnin'. He never had a chance to send another dart my way, fer one-handed I warmed up that thar brier patch with a dozen shots. I reckon as how he must 'a' knowed some one 'd hear the shootin', for when some railroad men what had been workin' on the track come and holped me home, he war gone; but, Joey, ye'll git him. He left his hat. It war jest arter sundown then, and I know he couldn't find hit in that brier patch in the dark. Come daylight, he'll be thar to git hit. Ye lay low on the south side o' that big rock thar, Joey, and ye kin git him sure."

Nodding silently, Joe reached out and took his father's hand. Then he dropped the hand and grasped the rifle. Walking across to the fireplace, he hung up his panama hat on the empty gun rack above the mantel. A conspicuous target that, and he was not carrying any conspicuous marks today. He took down his old slouch hat and pulled it over his bandaged head.

"I'll be back here directly," he said. "Get me up a snack to eat, for I reckon that when I come I'll be leaving."

Passing out to the hard-packed clay of the door yard, he drove the hounds who tried to follow him back under the house. Stopping for a moment, and hearing the low sobs of his mother, he half turned to return and comfort her, then resolutely squared his shoulders. Turning up his coat collar to hide his white shirt, he buttoned it around his neck and vanished out of the fan of light, melting into the blue-gray mass of the spruce thicket that stretched down the hollow toward Grassy Branch.

Silently, with never the crackle of a dry twig breaking underfoot or the swish of a bent branch to betray his progress, Joe Allen crept onward, crouched over, trailing his rifle, tense, listening, every sense alert, as he had done many a time before, when he was deer hunting. The gurgle of running water ahead met his ears. He turned at a right angle to his course and cautiously, step by step, worked downstream through a laurel thicket toward the big rock just above the railroad bridge.

Hardly had he settled himself when, to the eastward, a silver-gray streak appeared on the horizon. Day was breaking. A cloud bank above caught fire and turned a brilliant scarlet; a glowing red sliver lipped the top of a distant hill, and a shaft of yellow light swept down Grassy Branch.

Hidden behind the thick foliage of a massed rhododendron, Joe searched the tangled web of blackberry briers opposite him with keen eyes. This was

a game that he knew. He had spent many a day hunting, and there were few men at Glen Cove with sharper eyes or keener ears.

He started. In the center of the patch a sassafras bush moved. Up on the hill above a black and tan hound sat pensively with drooping ears, waiting. It was Sneed Cowsie's dog.

Slowly Joe lifted his rifle. As if sent by fate, a blue jay settled on the dead limb of a locust and raised a raucous cry. Then silence again descended. The hound on the rise above lifted his head and twitched his nose inquiringly.

Joe knew beyond a doubt who was in the thick brambles across from him. The blue jay, from his vantage above, was looking down, his head cocked curiously to one side. A song sparrow flitted from one low branch to another, then perched a foot above Joe and sent out his clear, liquid, lilting song. A couple of crows sailed over the trestle, flying low, their feet outstretched, their wings spread. They almost alighted on the dead locust, but suddenly, with a raucous *caw, caw,* they beat the air with startled wings and drove away.

The jay sailed up in the air, flew across the creek, and lit high up in a shag-bark hickory tree. Then he swooped down inquisitively and perched a few feet above Joe, chattering and scolding. The avenger realized now that Sneed, across the creek, would be suspicious and careful. It would be a waiting game, and the first to show his position would be at a disadvantage.

The sun climbed up into the sky. The mists rising from the creek were dissipated. The air became warm. A swarm of gnats gathered around Joe Allen's head and bit viciously at the line on his neck above his upturned coat collar. By a supreme effort of his will he refrained from brushing them off.

An hour passed, two hours, tense, watchful. While Joe waited, the thought that had come to him as he rode out last night on the freight returned to him more strongly. Sneed across the creek there, who had shot at Joe's father—why had he taken that chance? Calvin Allen was famous as an expert marksman. Joe had oftentimes seen his father bring down a squirrel from the tallest hickory with a quick, apparently unaimed shot. At the turkey shoots the elder Allen was always placed ten yards behind the other contestants, and even with this handicap he generally won the prize. Sneed Cowsie had indeed taken a risk yesterday, and Joe knew that Sneed was a man of no personal courage whatever. Who was behind the fellow?

A shaft of sunlight filtered through the leaves, slowly crawled across the side of the rock, touched Joe's back, and moved toward his rifle barrel. With a movement as imperceptibly slow as the progress of the light, Joe moved the barrel so that no sun glint on it should betray his position. He calculated that it was after ten o'clock now. He had not given Sneed Cowsie credit for so much patience as the man was displaying

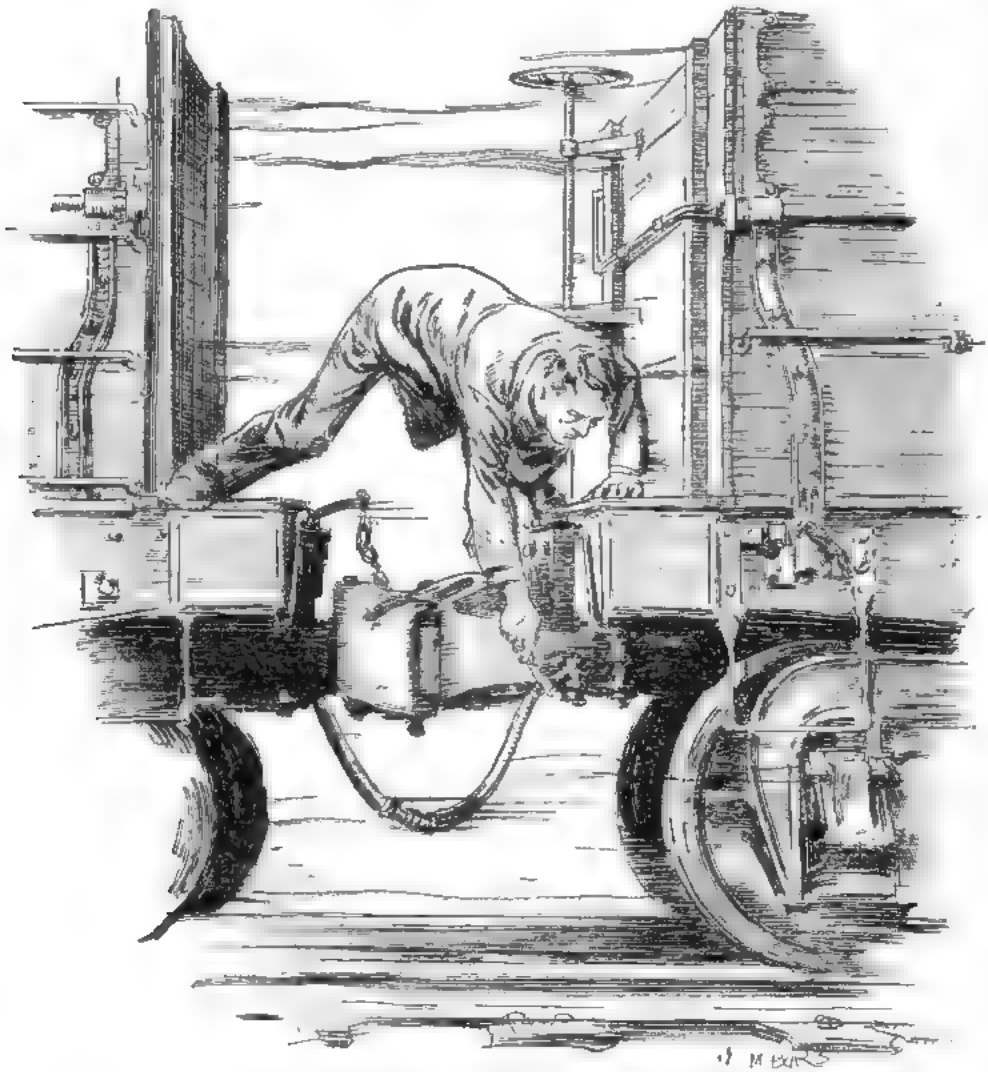
He resisted an impulse to drive a couple of rapid shots at the place where he was almost certain that Sneed was crouching. If he did that he would betray his own position, and would lose the advantage of his concealment.

His head pained him, and his injured shoulder was beginning to throb from the weight of the rifle. Cramped from his crouched position, his neck felt as if it was afire. Perhaps he was

mistaken; perhaps no one lurked over there in the space from which he never had taken his gaze. Perhaps the hound wasn't waiting for any one but himself.

landed with a sharp clatter and the swish of leaves, as if some one had moved carelessly in the bushes

At the sound, like a snake rising out



JOE BRACED ON THE END SILLS AND STARTED TO SAW AT THE AIR HOSE TO DRAW A SLOW LEAK

At last his patience came to an end. He would find out. His fingers closed over a stone. Carefully he tensed himself and pitched the rock overhand, scolding shrilly like a squirrel while he did so. It landed downstream fifty or sixty feet from where he stood—

of the grass, Sneed Cowsie's head popped into view beside the dead locust, not a hundred feet from Joe. Sneed stretched out his head and poked his rifle before him, jerking it in quick, nervous movements, as if he searched with it for a target. Joe Allen saw his

yellow, tobacco-stained shirt front, saw the white line on his bare head where his hat had marked his forehead.

Smiling a grim, satisfied smile, Joe lined the bead on his front sight into the notch of his rear sight—lined them straight for Sneed Cowsie's heart. Then, holding his breath, gradually, gently, so as not to disturb his aim, he pressed forefinger against the trigger.

XII

FAINT, far-off, almost indistinguishable, the echo of a locomotive's whistle trembled on the quiet morning air, *waa, waa, waa, wahoo!* At that half heard sound, Joe Allen's tense, breathless pose slackened. Gradually he lowered his rifle. He recognized that faint whistle call. It was the 1001, Jack Eagle on the Blue Streak.

The cold, calculating rage that had possessed him suddenly vanished. Through his mind flashed a picture of June Eagle, sitting at the piano, singing—sitting in a quiet, peaceful, comfortable home. He knew that if once he pulled that trigger he could never again enter there; nor would he ever pull a throttle on an engine like the one that was signaling in the distance.

Other things entered his mind in quick, white-hot questions. His face flushed with shame when he thought of June—laughing, clear-eyed June Eagle, who had given him her friendship. What would she think of him if he shot a man from ambush, if he became an outlaw, skulking in the hills?

The Blue Streak's whistle sounded again, nearer now. Joe Allen's troubled face cleared. A gray squirrel, which he had disturbed when he pitched the rock, chattered noisily from a tree down the creek. He saw Sneed Cowsie stoop over, pick up a rusty-looking slouch hat, and poke a foolish finger through a hole in its crown. Evidently Sneed had decided that he was safe, that no one lay in wait for him. He set the hat on his head, parted the briers, and came down toward the branch, his gun crooked in the hollow of his arm. Joe, watching, saw him reach the edge of the water, stoop to his hands and knees, put his head down, and drink. His rifle lay on the rocks beside him.

Ca-chu, ca-chee, ca-chu, ca-chee—the 1001's exhaust swished loud, and a heavy rumble rose as the engine drove upon the trestle. Joe looked up. He caught a swift glimpse of Jack Eagle, saw the flash of his red handkerchief and the outline of his blue jumper, and the engine passed from view. What would Jack do if he were up against a game like this? Man to man, Jack would settle the affair with his fists. He would need no rifle.

Then Joe knew what to do. What a fool he would have been to shoot Sneed Cowsie! On the one hand, he would get himself into a trouble that would stay with him all his life; on the other hand, he would silence the only man who could answer some of the questions which had formed in his mind that morning.

The clatter of the coach wheels rumbling across the trestle above blanketed the sound of Joe Allen's feet as he leaped from stone to stone across the creek. Before Sneed was aware of his presence, Joe had grabbed the rifle and crashed it against a rock into a useless thing of smashed stock and twisted barrel. Then he jumped again, caught Sneed by his shirt front, spun him around, and flung him flat on his back on the ground. Sitting astraddle of the fellow's chest, he reached for his throat.

As a matter of fact, Joe was bluff-

ing. Had Sneed known that his assailant's left arm was of little use, he might have succeeded in getting away; but he was too much surprised to attempt resistance. Dumfounded amazement showed in his wide open eyes and gaping mouth—amazement that gave way to a hopeless expression of terror.

Neither spoke for a minute, then Joe asked a question and made a threat

"Sneed Cowsie," he said, "if you want to live, you'll tell me who put you up to shooting at my pap. You'll tell me who it was, and you'll tell me why he did it."

Sneed's face was ashy gray. Joe could feel the coward's body trembling under him.

"I—I—don't—"

Joe tightened his grasp.

"Don't! Don't!" Sneed squealed. "I'll tell ye! Let go my neck, an' I'll tell ye! It war Upson."

"And why?"

"He wants to git yore pap's land. I don't know why. He made me do it," Sneed whined. "I never wanted to, but he made me."

Joe had found out what he wanted to know. He released Sneed, little realizing that he was missing a chance to learn far more.

"You're nothing but a yaller cur, like the one whose bidding you did!" he spat at the cowering craven before him. "A yaller cur! I could have killed you easy, but you're too mean and small for me to kill. I'll let you live, but not around here. I'll give you five minutes to get to traveling. If I see you again, it 'll be a sad day for you!"

Picking up Sneed's hat, Joe slapped it on the fellow's head, and helped him to get started with the toe of a heavy shoe. Scornfully he watched him scramble through the briers—watched him stumble and half fall, and then get to going, running fast and dodging from side to side, as if he expected each moment to hear the crash of a rifle and feel the impact of a bullet.

Joe crossed the creek, picked up his rifle, and went back toward home, a grim smile of satisfaction playing around the corners of his mouth. Entering the cabin, he set the weapon in a corner and took down his hat from the mantel. His father, grunting with pain, rose on one elbow.

"Ye saw him, Joey, did ye?"

Joe nodded.

"I knowed fer sartin he'd come," Calvin chuckled. "He warn't expectin' ye thar, war he, Joey?"

Joe shook his head.

"And so ye got him, Joey?" Calvin went on in a satisfied tone. "Now ye'd better light a rag out'n yere while the goin's good." He considered. "Go up alongside Little Smoky. Thar's a holler nigh the top, and thar's a camp rock down that thar holler. No one 'll ever think ye'd stay so near to hum. Ye kin slip down of a night to the chestnut grove afoot our place. One of the gals 'll meet ye thar, and give ye somewhat to eat." Calvin Allen laughed grimly. "Sneed Cowsie, he's on his road to hell, damn him! Ye're a good boy, Joey!"

Joe's mother, tears in her eyes, came toward him with a paper bag in her hand.

"Yere, Joey, yere's a snack fer to eat. Oh, Joey, Joey! I wish ye'd not done it! Ye're in sore trouble now. Things hain't what they uster be. The law'll be arter ye, the law and the Cowsies. Atween them, they'll git ye somehow or other!"

From his pallet in the corner Calvin Allen's voice rose.

"Hush that greetin', woman, and let the boy git to goin'!"

In one of the rare moments when he displayed his feelings, Joe put his arm around his mother's thin shoulders.

"Maw, ye needn't be scared for me," he said affectionately. "I'm in no way for the law to harry. I—Sneed Cowsie, I let him go."

At these words his father half sat up.

"What?" he shouted, unbelief and astonishment in his tone. "Ye had a chance to scrotch that thar snake that done me so sore? Ye had a chance to wipe out all the slurs and meanness he's laid on me and on the name ye bear? Ye had a chance, and ye let him go?"

"Wait, pap," Joe halted his father's outburst. "Sneed Cowsie is only the tool of a far cleverer rascal. I did a better thing when I drove him off than you have any idea of. Only bad could come of shooting him. You'll see for yourself, I know, and I don't think it 'll be long afore you realize it."

Calvin lay back on his pallet, his anger cooling slowly. After a pause he said haltingly, doubt heavy in his voice:

"Perhaps ye know best, Joey. Ye've bin to town and larned some of the things what makes the furriners thar different from us folks yere. Perhaps ye done the best thing, Joey; but if I'd bin thar this morning, Sneed Cowsie'd 'a' arrived in hell in time fur dinner to-day!"

Joe turned and stepped out through the door.

"Pap, I'll see that a doctor comes to ye. Ye'll need some attention."

His father grunted deprecatingly.

"Don't ye send no doctor around yere to me, Joey. He'll jest keep me a lyin' around in bed fur a week, and I'm more mad than hurt right now. I aim to git myself up to-day. I'll git plenty o' time to lie quiet arter I'm daid, and I'm not daid yet by a long shot. It riles me up," Calvin muttered, "that I was simple enough to let Sneed Cowsie pop one inter me from less than fifty feet away, and was so took off my guard that I missed him clean and slick, when by all rights I should have filled him as full o' holes as a moth-eaten pair o' jeans. Good-by, Joey! I'll hunt ye up fust time I come to town, and let ye know how things stand out yere."

"Good-by, pap," replied Joe. "Good-by, maw. You'll be hearing from me right along."

He walked rapidly up the path that led to the hilltop. At its crest he turned and gazed back. His mother stood in the doorway, dabbing at her eyes with the hem of her apron.

A lump rose in her son's throat. He waved his hand to her and went down the hill toward the railroad.

XIII

When Joe got back to the terminal, he went straight up to the doctor's office and asked for a release.

"I want to get back on my job," he explained. "I'm tired of loafering."

The doctor laughed.

"You're the first man I've ever heard that from. Most of these railroad delegates lay off convalescing as long as they can draw their pay, and take things easy."

Joe shook his head.

"It's a tiresome job, loafering, doctor. I've not been on the railroad long, and I've got so much to learn that I want to get at it."

He got the doctor's release, telephoned to the call office, and marked up for his run for the next day. Then, going up to his room, he slumped down

in a chair. He was tired; he had been up all night, and nature soon asserted itself. Leaning back in the chair, Joe fell asleep.

When he awoke, he saw from the slanting sun rays that it was evening. He had eaten neither breakfast nor dinner that day, so he washed up and went down to the restaurant. He had intended to have it out with Upson, but a glance at his watch showed him that he was too late. The clerk would have left the office by now

"IF YOU WANT TO LIVE YOU'LL TELL ME WHO PUT YOU UP TO SHOOTING AT MY PAP"

After he had eaten, he came out on the street. A flashing flame-colored roadster passed, running fast. Upson sat behind the wheel. Before Joe had got back to the Y. M. C. A., it passed again. Around the curve before the station the flashy roadster swished, headed out toward the highway that led from town. June Eagle sat beside Upson, smiling as if she was enjoying his company

This was no pleasant sight for Joe Allen. Had there been a brick at hand, he would have been tempted to "bounce it off the dome" of the chief clerk. Such, at least, were his muttered sentiments as the car passed. He

had a score to settle with the man who was driving June out that night.

That, then, was how things stood—the girl's engagement for that evening was with Upson. That was why she wouldn't let Joe come up, and why Upson was so much concerned over his talking to June the other day before the station.

As he stood gazing belligerently after the car, he saw the superintendent come out of the station across the street and throw up his hand in a beckoning signal. Joe walked over.

"Good evening, colonel," he said. "You wanted me?"

"How are you feeling, Allen?" returned the superintendent. "How's the head getting along?"

"Oh, I'm O. K., colonel, and ready to pick up a shovel again. The doctor's given me my release, and I'm marked up for my run."

"That's good, Allen." The colonel hesitated. He seemed to be pondering over a problem. "How do you like the Slabtown run, Allen?"

The pointed way in which the question was put, and the shrewd, studious expression on the superintendent's face did not pass Joe unnoticed.

"It's not so bad, colonel." Then, again recalling Jack Eagle's advice, he went on: "I don't know but what I'd just as soon be on it as any run. That is, of course," he added quickly, "till I get age enough to bump some one off a main line job."

"Well, Allen, I was just thinking the same thing. It might not be a bad plan for you to mark up as regular fireman on it. You're on the extra board here on the main line, and you might probably have to buck that extra board for two or three years more before you go up for promotion. I feel that the company owes you something for what you've done"—the superintendent's eyes narrowed—"and I'm giving it to you now. Mark up for the Slabtown branch at once. Tell the call boys to put you down for that run and mark you off the main line; and, Allen, don't let any one talk you out of it."

Before Joe could catch his breath to ask any questions, the superintendent turned away with an abrupt "Good night, Allen," and signaled a street car.

Joe watched the car stop and saw the superintendent get aboard. He checked the impulse to run after him and demand an explanation. What lay behind this? The colonel acted as if he were doing the young man a favor. A strange favor that, to give him something no one else wanted!

He continued down to the Y. M. C. A., and stepped to the telephone.

"You've marked me up on the Slabtown for to-morrow night. This is Allen," he notified the chief caller. He hesitated for a moment, then added: "And when you put me down for that run, I'm going on it regular from now on."

He heard a grunt of surprise.

"Allen? Slabtown? Say, Nervy, you kin bump Green off'n the work train, or Dutch off'n the ditcher. You got the age on 'em. What you want to mark up for the Wooden Axle regular for, Nervy?"

"I know, I know," Joe answered testily. "I know I can get other runs, but I'm going out on that."

He started to hang up the receiver when the call boy's voice stopped him.

"Say, Nervy, at that I'm glad you're taking it. The circus special is due in town to-morrow morning, and half of the firemen are laying off. There's more cases of croup and the mumps and distant relatives dying in the last

day than there will be for another year, till circus time gets here again. All right!" The boy breathed a sigh of relief. "I'll put you down, but it's your own asking, and I'm sorry for you—up there with the hoot owls all night, and missing the excitement of circus time here!"

Joe hung up.

"The circus!" he repeated. "I wonder if—I'll find out!"

Hurrying up to his room, he wrote a note inviting June to go to the circus with him the next afternoon, sealed it, and came downstairs to the mail box. She would get it first thing in the morning

Back in his room, he tried to read, but the letters on the pages made no sense. They were but meaningless blurs, black blobs against the white paper. Behind them he saw June Eagle sitting close beside Upson, saw them riding along through the warm spring evening under the bright moon.

He turned in early, for he had had a hard day. To go out each night at five o'clock, to return at eight each morning—his evenings would be spoiled, his nights spent far out in the mountains at a lumber camp. Moonlight evenings were made for courting, and he was deprived of that. Upson would not be slow to take full advantage of his absence.

But if Upson had the evenings, Joe's days were his own. Next morning, just before noon, he could curb his impatience no longer. He called June on the telephone.

Yes, she had received his note.

"You'll go, will you, Miss June?" he asked anxiously.

She hesitated. The thought flashed through Joe's mind that she did not seem so cordial as the other night. He knew it was not beyond Upson to influence her if he could. The clerk's methods were certainly not open and aboveboard.

"I don't know about it, Joe," she said slowly. "I intended to do some shopping. Can't you come up some evening this week instead?"

"Miss June"—there was a catch in his voice that he tried hard to control —"I'm going out on the Slabtown run to-night, and every night from now on, except Sundays. I thought—I hoped—"

The tone of her words changed, and her voice conveyed her quick concern.

"You shouldn't have marked up yet. You're not well. Don't you think you're taking a chance in going to work so soon after being hurt?"

He laughed.

"Oh, pshaw, Miss June, I've been hurt that bad several times before, and I'd yell, 'Ouch!' bat my eyes a time or two, get me a drink of spring water, and go on with what I was doing. They make a lot of a little thing here. I'm perfectly able to enjoy the circus —with you. Will you come?"

"Yes," she consented. "I'd like to."

At half past two they walked down between the tents on the crowded circus grounds in the lot behind the shops. The railroad men were there in numbers. Every few feet some one would call and ask:

"Hey, Joe! How are you?"

"I'm O. K.," he would reply.

With pride he noticed that although they spoke and called to him, their eyes were on June.

Once or twice, among the crowd, Joe would nod to some man unmistakably a mountaineer, and the invariable response would come:

"Howdy, Joey? I'm tolable, air ye tolable?"

They stopped before a side show where a raucous-voiced barker described the wonders and mysteries within which could be viewed for the small and insignificant sum of a thin dime. June looked from the speaker toward her companion. She was laughing at the barker's description, but her smiling face suddenly changed at Joe's expression. Her eyes followed his to where, standing on the outskirts of the crowd, four people huddled in a little group—a man, a woman, and two almost grown girls.

By all the signs the four were mountaineers. The man wore an ill fitting homespun suit, with one sleeve dangling empty at his side, and his arm tied up under the coat with a bandage. A slouch hat, flop-brimmed, half covered his face, and one of his trouser legs was hitched up over a brogan shoe top. He was munching a cud of tobacco and gazing about him with a half bewildered, half belligerent air. The woman, dressed in calico, with a poke bonnet on her head, her clumsy gaiter shoes mud-stained, stood a step behind. Holding on to her dress, the two girls, round-eyed, timorous, stared about them with keen interest.

From her survey of the group June turned toward Joe. He was biting his lips, a wrinkled crease was deep in his forehead, and his eyes were filled with an expression that she could not fathom. Suddenly he grasped her arm with a hold that hurt her. His voice was hard when he drew her toward the four and said:

"Miss June, meet my mother. Pap, this is Miss June Eagle. Prudence and Cynthia, Miss Eagle."

Joe's mother bowed.

"Howdy, miss?" she said to June.

Calvin Allen shifted his cud and looked from the girl to his son.

"How air ye?" he inquired.

The two girls stood bashful, diffident, unspeaking, twisting their handkerchiefs into knots in their hands. A painful pause followed. Then Joe's mother spoke, looking at her son's bandaged head.

"How air ye comin', Joey?" she asked.

"Oh, I'm all right, maw," he replied. "I needn't be having this bandage on now, 'cepting the doctor says for me to let it stay there for a day or two. How you coming, pap? Ain't you taking a chance coming into town so soon after—after—"

Calvin shook his head.

"No, I'm feelin' right pert, Joey. I didn't aim to miss the circus. Besides"—his voice lowered—"I've got somethin' to tell ye."

Joe glanced hurriedly at June and changed the subject quickly.

"Come on," he said "Let's go in. It's almost show time."

He led the way to the ticket wagon, where he bought tickets for them all.

"Joey, Sneed Cowsie's a hidin' out near Slabtown," said Calvin.

June felt Joe's hand on her arm tighten, and heard the forced indifference in his answer.

"Let him hide," he said. "I ain't owing Sneed nothing."

"Mebbe ye don't, but I do," his father persisted. "And—"

A raucous voice drowned out the rest of the sentence.

"Right this way for the reserved seats!" an usher shouted.

Joe sat between June and his father, with his sisters on her other side. She heard Calvin Allen telling his son:

"I reckon as how I'll have him ter handle. I 'lows as how Sneed 'll git right uppish, bein' as how ye let him go. 'Sides that, hit's gone all around

how ye handled him t'other mornin'. Pink Haliburton and Tom Warden war a comin' acrost the bridge, and done seed hit all. The news done spread how ye sent him yelpin'. Hit's him or ye, and he'll vent his spleen on me arter he feathers inter ye. When ye come past thar on an engine, he's apt to try a dart at ye, and ye've no comeback. 'Sides all that, Joey, thar's a heap o' risk a railroadin', and, son, I'd be powerful put out if somethin' happened to ye."

The performance started. Chin cupped in her hands, June sat looking at the acts that were given in the three sawdust rings before her—looking without seeing. A quick glance at Joe Allen had filled her with a great sympathy.

Joe sat hunched over, the picture of dejection, his head between his hands. Evidently the news about this Sneed Cowsie had upset him. During lulls in the blaring circus band music, she could not help overhearing snatches of Calvin's talk. Once she heard him say:

"He'll feather inter ye shore, Joey, if he figgers none is behind ye. Ye'd better be comin' home with us, Joey Thar's a livin' thar fer ye, and none to be takin' orders from. Ye'd not be hurted save by Sneed, and we-uns together would soon fix him if he came gommin' around us."

With stubborn persistence, Joe shook his head. He turned to June. The final act in the arena below them drew to a clashing climax.

"Well, it's over, Miss June, and I've got to get ready. I'm called for five o'clock. Good-by, maw. I'll be seeing you-all again. Pap, take care of yourself."

Taking June's arm, he helped her down from the seats, and they joined the crowd that moved toward the exits.

Crossing the overhead structure that bridged the railroad, they made their way through the thinning crowd up the street. Neither spoke till they reached June's home.

"Joe Allen," she said softly, and paused. "Joe Allen," she repeated, "I couldn't help overhearing what was said to-day."

"That part of it was what I regret most, Miss June," he replied soberly.

"And, Joe, I respect you a lot. I wonder—I wonder how many men would have done as you did!"

He looked at her in surprise.

"Why—" he began, but stopped in embarrassment.

She clasped his hand.

"Now run along, or you'll be late on your call. To-morrow, when you come in, give me a ring."

She turned up the pathway, but halted on the porch, and stood watching him go down the street. When he disappeared around the corner, she said to herself:

"He has his faults, has Joe, but lack of either moral or physical courage is not among those faults."

A little smile played around the corners of her mouth. It was sweet, she thought, to see how he addressed his people. He spoke their own language and did what he could to put them at their ease.

"I wonder what Mr. Upson would have done under similar circumstances," June mused. "I wonder indeed!"

Thoughtfully she stood at the door of her home. Could Mr. Upson's vague and indefinite remarks about Joe Allen bear investigation? She shook her head impatiently. Time would tell.

To Be Continued

LAST WORD IN MOTORS

THE Rock Island Lines are now placing in service seven distillate electric motor cars of 800 horsepower each. From the standpoint of power developed, these motor cars are the most powerful thus far placed in service by any railroad in the United States.

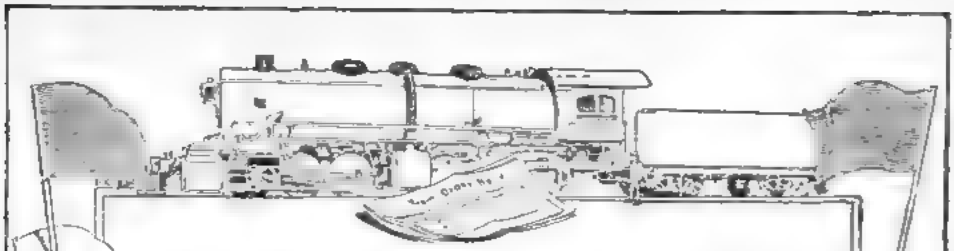
The power plant equipments were supplied by the Electro-Motive Company of Cleveland, Ohio, and each power plant consists of two 400 h. p. heavy duty railway type distillate burning engines of 8 in. bore and 10 in. stroke, developing their rated horsepower at 900 r. p. m.

The generators and traction motors are of the heavy duty railway type and were designed especially as a part of the transmission for this particular engine.

The burning of the heavy fuel known as distillate is accomplished through the means of a special carburetor developed by the Electro-Motive Company for this particular type of fuel.

In passenger service they have a tractive effort of 30,000 pounds at 5 miles per hour. When equipped with proper gears for freight service, they have a tractive effort of 36,000 pounds at 5 miles per hour.

Used in freight service, these motor cars are geared to pull a freight train of 800 gross tons up a one per cent grade at 8 miles per hour, or 37 miles per hour on level track. In passenger service, these cars will haul a total of 260 tons, based on 4 trailing cars in fast service. Each car carries two fuel tanks of 300-gallon capacity and is equipped with a hot-water heating plant for cold weather service.



Opportunity

for advancement in railroading has never been greater than it is today. Younger men are being called upon for the executive jobs. Your turn may be just around the bend. We want to be of service to you, line you up so that opportunity will not pass you by.

"MAKING THE GRADE"

By the Promotion Pilot

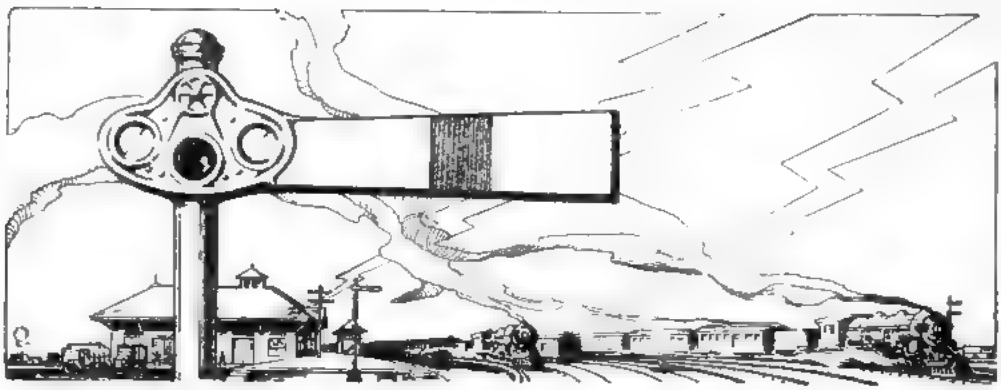
is a new department which will appear in the February issue of RAILROAD MAN'S MAGAZINE, February 1st. It is designed to help those railroad men and women who want to help themselves. We invite you to present your problem and assure you we will observe the strictest confidence and do our best to show you the way out and up the long pull to a bigger and better job. Address the

Promotion Pilot

RAILROAD MAN'S MAGAZINE

Put this department to work for you and you will help yourself over the hill. Watch for it next month.

MY GREATEST THRILL



A department where true experiences of railroad men are related. Prompt payment at good rates is offered for narratives of personal thrills. Each story must be verified.

ONE NIGHT OF TERROR

The Operator Couldn't Remember Whether He Had Muddled the Meet on Mixed Orders

By Jacques Girourard

EVERY railroad man can boast of some thrilling experience. Most of them do. But my one and only thrilling experience in the railroad game is not one of which to boast. Even after all these years it still sticks in my memory and comes back to haunt me with its harrowing details. I doubt that I ever will be able to forget that night of terror I spent at Catalan, in 1912.

Catalan is down in Oklahoma. Never mind the railroad. It is still there. The same little old box car set out on piling at one side of the track. The nearest farmhouse a mile away. It was at the farmhouse that I boarded, along with the agent and the other operator.

My shift was from ten at night until six in the morning. Nice hours to work, if you don't care what you say. True, the work was easy. Many a night that I did not copy a half dozen orders. Most of my time was spent in reading, when I was on duty. I read anything and everything that I could get my hands on.

I was reading this night when my sounder began to tick off my call. "Nineteen copy three," tapped the dispatcher, after I had answered. Then the order:

"Extra 432 east has right over No. 195 Catalan to Musquot."

No. 195 was a manifest freight train. The extra, as I was to learn later, was a stock pickup. Musquot

was the second station east of me. A little blind siding was the first station, and was named Kime.

With the order completed and the clearances filled out, I took down two hoops from the wall and attached the orders to the place provided for them. All nineteen orders were handed up on the fly so as not to stop the train. This done, I set my order board to show yellow, the signal for any oncoming train that a nineteen order awaited them.

I was just settling back to my reading when I heard Barlow, two stations west of me, giving the dispatcher an OS on Extra 432. No reason why I could not finish my story before they got to me. It would take them at least thirty minutes to make the run over there.

So back to my story I went. It was an exciting story and well worth any one's attention. It certainly had mine. My sounder was banging away for dear life when I roused myself enough to put down my magazine and answer it. This time the dispatcher addressed the order to me. Evidently he had changed his mind about the extra, for the order before me read:

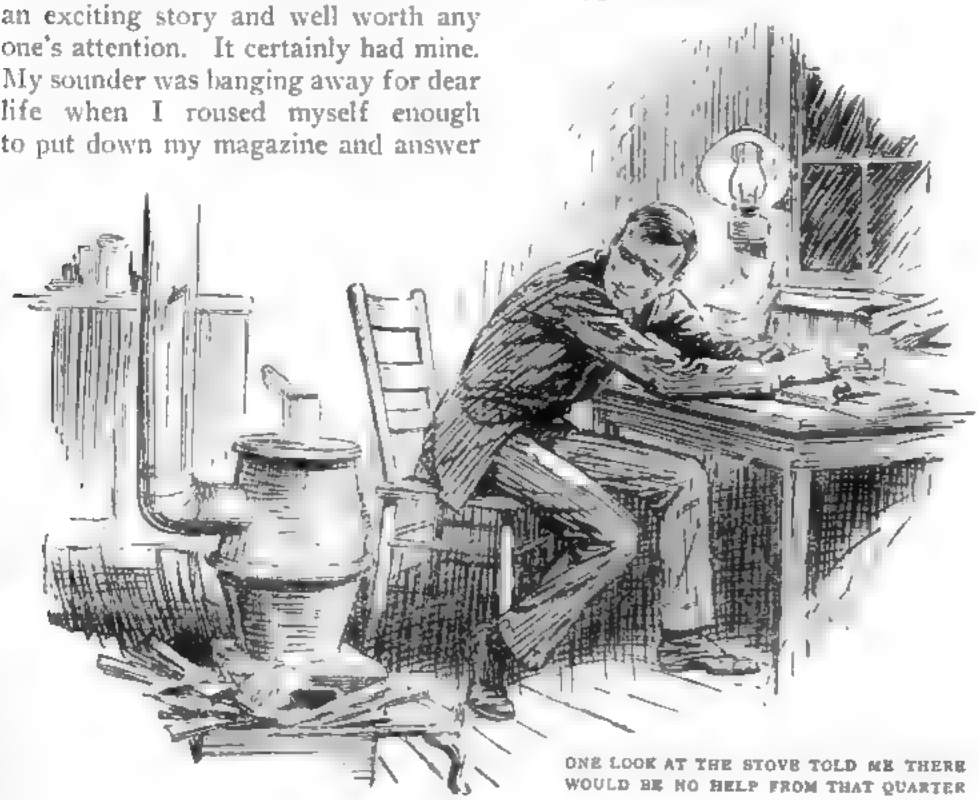
"Order No. 97 annulled."

Order No. 97 was the order to the Extra 432 giving right over No. 195 to Musquot. That left me with no orders for the extra east, so I cleared my board and took up my magazine again. Ten minutes later I laid it down to answer the dispatcher again.

"Nineteen copy three," commanded the dispatcher.

"Well, the old change-his-mind!" I muttered peevishly. "I hope he finally finds out what he wants to do."

A brief wait, during which I took time to put my semaphore red. Then the new order: "Extra 432 east meet No. 195 at Kime."



ONE LOOK AT THE STOVE TOLD ME THERE WOULD BE NO HELP FROM THAT QUARTER

Hardly had I finished repeating this order and getting it complete when I saw the reflection of a headlight down the track west of me. Hurriedly I made out the clearance and got an O. K. on it. Then I tore the orders off the manifold and wrapped them up in the clearances. I was just taking the orders that had been annulled from the hoops when the dispatcher called me again.

"Take message," he ordered.

I laid the orders down as I answered. The message had to do with a car the conductor had picked up down the line. The whistle of the extra was sounding for town when I wrote the last of it. By the time I had it folded with the order for the conductor, the extra was answering my yellow board as I gathered up my hoops with their orders and tore out the door.

I barely made it. The fireman was down in the gangway to catch the hoop I held up to him as the engine shot past me in a cloud of smoke and a shower of cinders. I was glad to catch my breath before the caboose came along. For the first time that night I noticed that the air was quite chilly.

Back in my shanty I decided to start a fire before taking up the story where I had left off. The two rolls of the annulled orders I gathered up along with some newspapers and thrust them in the stove and tossed in a piece of kindling wood—anything to take the chill off the place. While they were warming up the shanty I OS'd the extra and tore off the third copies of the other orders I had copied and filed them away on the hook along with the clearance for future reference as per the rules of the road.

I had just finished these details when I heard the operator at Musquot OS No. 195. From the looks of things it was to be a perfect meet. Then I tackled my story again.

Thirty minutes later I was still absorbed in the story. It was growing close to the end. For that reason I ignored my sounder's calling until I found out how the story turned out.

"Where's No. 195?" asked the dispatcher, when I finally answered

"Don't know," I replied. "Not here."

"See them coming?" he tapped out.

I looked out my window. No headlight was in sight. I reported my findings and closed the key. Almost immediately he was calling Musquot for information about the extra. Musquot reported no extra and no sight of them. I lighted my pipe and wondered what was delaying the trains. They should have met and been about their business by now. Now, my sounder was calling again.

"See anything of 195?" he asked again.

"No," I answered.

A brief pause. Then: "Repeat that order again."

It was while repeating that order that I had the hunch as to what I might have done. The dispatcher's O. K. lacked much of satisfying me. I was just remembering that I had laid down the orders which had the extra and No. 195 meet at Kime, to copy a message.

What if I had picked up the first orders, later annulled, and given them to the extra?

A cold sweat broke out over my body. My hands began to tremble. One look at the stove told me there was no help from that quarter. Long ago those orders, whatever they were and whichever they were, had gone up the chimney. I forced my wobbling legs to carry me to the door for a look down

the track. No headlight was in sight. Not even a glare anywhere in that darkness to the east. As one in a panic I climbed to the top of the semaphore for a better view. Same old thing. Only darkness.

My sounder was calling again when I returned. I could only marvel at the steady tapping of his key. My own key work sounded more like a man with the palsy.

"Guess we might as well call the wrecker," came over the wire after I had reported my doings on the semaphore. "Call you later. Stand by."

I looked at the clock. It showed one thirty. Extra 432 had departed at twelve forty. Fifty minutes for them to go four miles to Kime and No. 195 to get to Catalan. A fast walker could do it in that time. I wondered if the dispatcher guessed that I had bungled the orders. Evidently he did, or he would not have asked me to repeat the last one. He was merely putting himself in the clear. I would be the one held to blame.

Something stuck in my throat and made me swallow hard. I would be to blame. Maybe I would be indicted and sent to prison. The I. C. C. had become rather censorious the past few years in investigating wrecks. For just a moment I had the wild idea to close up the station and depart for fields unknown. Better anything than prison.

"CA," went my sounder. "CA, CA-D."

I answered. I was told to hold my board on No. 2, the road's crack train. She was due at Catalan at 2:10 A. M. It took all my strength to put the board in position. In my mind I was already serving my prison sentence.

Five minutes passed. Another five. They were as so many years to me. Long ago I knew that I had given the wrong orders to the extra, the orders that gave them right over No. 195 to Musquot and were later annulled. My lips began to move in prayer. It was too late to pray for some way to rectify the mistake. All I could pray for now was that nobody would be killed or badly hurt. I was willing to serve any length of sentence so long as it would save me from being a murderer.

Now Barlow was OS'ing No. 2. Every tap of the sounder seemed to toll my death knell. With a choking sob I buried my face in my hands and began to cry. I was still sobbing when to my ears came the chug-chug-chug of an engine somewhere outside. Hardly daring to believe my ears I peered through the window to make sure. At the same moment the box car door of the station slammed and a voice demanded to know "what the hell I had on the board."

I looked up. A much begrimed brakeman's face stood framed in the little window.

"Board?" I gasped. "Why—why—nothing at all. Are you No. 195?"

"Hell, yes!" snorted the brakeman, and I could have hugged him for those words. "That crazy Irishman, Flannigan, on the local, went and set out twenty cars at Kime and don't say nothing about it. Then along we come with fifty-six cars and hold the main and Extra 432 tries to wedge her forty-six cars and the other twenty in a siding what holds but fifty. We been two hours sawing ourselves out on account of the 432 not being able to handle so many wagons. And if you don't think it was some job, figure it out yourself."

Later on I did figure out the problem and how the trains both managed to pass on inadequate passing tracks. It took a long time and lots of paper.

Maybe you can figure it out. I finally did. But at that particular moment my heart was too full of thankfulness to waste time on figures. All that I knew was that I had given the right orders to Extra 432 after all. Then and there I made a vow which I have never broken, and that vow was to permit nothing to distract my attention from my work. I've lived up to it religiously.

"Say!" demanded the brakeman. "Gimme a clearance or something on that board. No. 2 will be here any minute now."

I nodded even as I hammered my key in a call for the dispatcher. No general ever announced more proudly or more gleefully the news of a taken city than I did the fact that No. 195 had arrived at Catalan.

"O. K.," wired back the dispatcher, and I could almost feel his relief. "Let No. 2 go."

And I did and how! And with another prayer.

THRILLED BY A VOICE

All Hands Scattered to Safety at the Warning and Command of a Blood-Curdling Yell

By Charles Frederick Carter

TO confess that the supreme thrill of my life was caused by a voice may lead some folk to jump to the conclusion that this is just another of those romances. But it isn't. The voice referred to was not of that gender.

Tamagno, the great Italian tenor who adorned the operatic stage when the Chicago Auditorium was new, made little chills trickle down the spines of even the most phlegmatic listeners when he murdered Desdemona in cold blood. Tamagno certainly raised wife murder to a fine art.

Then there was Caruso, who had a real nice voice. In fact, Caruso was quite a singer. Yet neither of these great artists, nor yet other stars who have illumined the operatic firmament, though they left cherished memories, ever succeeded in inspiring that which could truthfully be defined as a supreme thrill.

No; the only voice that ever achieved so much, and that but once, since these supreme moments come but once in a lifetime, was completely surrounded by a boomer brakeman; for this was in the days when the bulk of passenger traffic was composed of peripatetic railroad men who scorned to carry any transportation other than the regulation regalia of their class and period; namely, to-wit, which is to say, a double-breasted sack coat, a celluloid collar, smoke stains behind the ears, sublime gall and the magic countersign.

"Jever show any favors to railroad men?"

This, properly recited to any captain of varnished cars, was expected to produce the coveted ride, plus the

permanent loan of a dollar. But about that voice.

Its owner answered to the name of Dave when I knew it. Dave and I helped Mr. Vanderbilt build a railroad out in the great open spaces, where men are said by scenario writers to be more or less masculine, and where women are Governors or nice young lady cowboys, in the days when varnished cars were connected by Miller hooks and when engineers on a few freight locomotives equipped with air pumps declined to use driver brakes "for fear of springing the driver boxes"—at least, that is what they said. Anyway, they would simply shut off and let 'em drift until the cows came home, while the train crew got out on top and gave lifelike imitations of brakemen earning their wages.

ALL THREE TRIED TO GET OUT OF THE SIDE DOOR OF THAT CAR AT THE SAME TIME

Dave and I played a twosome on the second front train of a construction outfit laying two miles of track a day. Dave was hind man; I was head man, which is to say I was nothing of the sort; for the head man plays second fiddle to the hind man, if you get what I mean. Anyway, there we were out in the great open spaces, moving two miles into more open space between sunrise and sunset.

The first front train did nothing but handle the steel, moving forward a single joint at a time. The second train tagged along behind, throwing overboard ties, telegraph poles and such like, to be picked up by teams and hauled around ahead of the track-layers.

This arrangement gave the second crew the privilege of doing all the switching when the daily supply train came in with material for the next twenty-four hours. There was never more than a single siding, not yet ballasted, and it was all cluttered up with the boarding train, so that in this switching business a pleasant time was had by all. Every three or four days the boarding train was moved ahead to the next siding, as a result of which the supply crews often had new territory to explore, not infrequently at night, with no telegraph offices handy.

One evening after we had moved forward to a new siding the supply train failed to show up when due. It had passed the last telegraph office, some twenty-five miles down the line, about the proper time, but after that all trace of it was lost. Something apparently, had happened; what it was there was no way of finding out until

the supply train showed up, if it ever did.

Dave and I made proper arrangements for receiving the supply train, which is to say, we shoved the boarding train down the main line to get it out of the way, then placed our own engine on the main line with the caboose behind it, presumably so that if that supply train came in too fast the engine would be partly protected by the caboose.

That caboose was a side-door Pullman, or box car, in the language of literal-minded folk, in the last stages of senile decrepitude. The contractor had drawn it for a caboose because its seams had opened up until it would hold nothing smaller than a medium-sized brakeman. As was the universal custom in those days, there was an end door, which was not a door, but a window just big enough to admit a brakeman in quest of small change from tourists who preferred to travel that way. The track at this point was a tangent on a moderate down grade a mile long. Thus that open end door was aimed straight down the main line. All this is necessary to understand about the voice.

After all that could be done had been done, we sat around and wondered what in time was the matter with that supply train until no one had any new thoughts to offer. Then, about half past one o'clock in the morning all hands went into the caboose to get a little sleep against the day of trouble that seemed to be headed our way. We had double-deck bunks built of rough boards and mitigated with an armful of hay.

Dave lay in an upper bunk with his face pointed at that open end door, which, as you must remember, was aimed straight up that mile long hill. All hands sank into profound slumber in three seconds after hitting the hay.

Thirty minutes later Dave was suddenly awakened by a headlight shining into his eyes through that open end door. Dave was no Solomon, but he knew without being told that that headlight belonged to the belated supply train; he knew that the last eight miles of road had never been seen by men on that train; he knew that in those days about one brake on each four cars was in serviceable condition; he knew that there was a nice little grade for a mile down to the caboose; he suspected that those of the supply train crew would be sore over their delay and, perhaps, a little reckless. All this he not only knew, but he knew it all in the fraction of a second after he awoke. And did he give the alarm?

Gentle reader, indeed he did! He lifted up his voice and— But I must tell you about that voice. You will have to help out by using your imagination, for the English language has its limitations.

Have you ever heard a steam planer gnawing a knotty board? Very well: now graft that racket onto a calliope in its prime, then multiply the product by mortal terror, making a grand total of one billion candle-power. At all events it sounded something like that to me. If you had been there, sunk in the depths of slumber, as I was, and had had that uproar projected without previous warning against your tympanums, you would have thought so too, only more so.

Once upon a time I heard twenty tons of dynamite in a temporary warehouse let go. It did not explode one stick at a time; not at all. The whole twenty tons were unanimous—I might even say enthusiastic. Well, that was the way with Dave's voice. While he

uttered four words, they erupted in one Vesuvius of noise, thus:

"Gitoutohere!"

Even as he spoke, he did. He was far outside the right-of-way before the last accents of his vocal explosion had ceased to reverberate.

Thrilled? Don't ask foolish questions! Suppose you had been young and tender, and suppose you had been violently projected from deep sleep into acute consciousness of a perilous situation. Why, can you imagine anything worse than being cooped up in a forlorn box car at the bottom of a long grade in the path of a heavy and unwieldy train tearing down at you at twenty-five or thirty miles an hour?

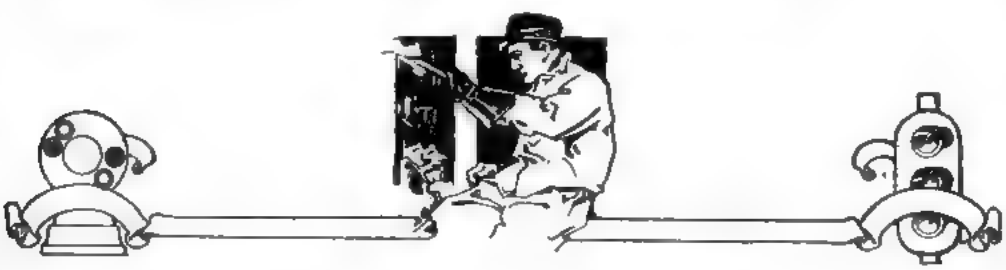
Why, even before it happened I could hear the crash of pine splinters, the crunch of human bones, the softer plop of steel plowing through internal organs. Talk about living a lifetime in a second! Why, in half that time, in addition to my own brief existence, I lived the lives of all my ancestors back to the fourth generation.

I determined to sell my life as dearly as possible, as they say in the movies. The sale was temporarily postponed by the fact that the engineer, fireman and conductor were simultaneously actuated by the same high resolve as myself. All three tried to get out of the side door of that car at the same time, with the result that they got stuck in the doorway, but only for an infinitesimal fraction of a second. Then they proceeded, carrying the door jambs along with them. This gave me more room to make my exit. That is to say, I departed from thence.

Yes, sir, it can truthfully be said that I was, for once in my life, thrilled by a voice.

How many were killed?

Oh, I forgot to tell you that the supply train, being in the hands of railroad men who knew their business, running on a strange road on a dark night, without information of our whereabouts, came down that hill under full control, at a speed of about two miles an hour, literally feeling its way inch by inch. We had not been in any danger whatsoever.



CLASS I RAILROAD INVESTMENTS

THE latest figures compiled by the Interstate Commerce Commission show a total of $24,873,474,000 invested in steam railroads throughout the United States. Class I railroads, according to the latest figures compiled by the commission, now have approximately 240,780 miles of road in operation, and a total trackage of better than 403,515 miles.

Motive power in service, including oil, coal and electric, amounts to more than 59,000 locomotives. In the way of rolling stock these railroads own and operate more than 53,000 passenger cars of all classes and 2,298,000 freight cars of all classifications.

The commission's valuation on these properties in 1920 was $19,300,120,000.

ON THE SPOT

Where Our Readers, Our Writers and the Editor Gather to Railroad to Their Hearts' Content

THERE is never anything quite so all around, downright good as an occasional slap on the back. There is nothing that can possibly cheer the editorial heart any more than to know that the result of watchful effort and wakeful hours has met with some measure of appreciation. To judge from the letters and telegrams which greeted the appearance of the December number of RAILROAD MAN'S MAGAZINE, just about everybody is glad to see this book back again, and to shake hands, as it were, with some of the old-timers in the crew.

And speaking of old-timers, we want to take this opportunity to rise, hat in hand, and remark about Lydia M. Dunham O'Neil, and what she did to that first section last month. It came about this way:

The latter part of September we cabled Miss O'Neil and invited her to return to the pages of the magazine. You see, she formerly was one of the regulars, and one of the stars in the line-up. Miss O'Neil cabled back her thanks and said "O K."

The magazine was on the press, half of the run was printed, and hundreds of thousands of inserts containing the full portrait of John J. Pelley had been run off. In fact, we were all ready to begin to put the December number together when along came a poem from Miss O'Neil entitled "The Come Back."

It was so appropriate to the opening that we just had to switch it in. The only possible chance was to shove it down on the back of Mr. Pelley's picture. We didn't think that Mr. Pelley would mind, and we knew that you folks would not want to miss Miss O'Neil, so job presses were thrown into motion, a shift of crews labored all night, and enough of the inserts had been backed up with the poem by morning to allow the binding of the maga-

zine to go on schedule. We all thought the poem a remarkable one, and we are sure you did too. Miss O'Neil will be seen with us on pretty regular trips from now on.

WHO'S WHO IN THE CREW

We know you want to walk up and shake hands with Brother E. S. Dellinger, whose great story "Lure of the Rails" opened in this issue. We had our favorite artist make an excellent drawing of Ex-Shack Dellinger, and we succeeded in yanking out of the author the following to explain himself:

Springer, New Mexico,
November 18, 1929.

DEAR MR. HAYES:

I don't like to impose my delay sheet upon the readers of RAILROAD MAN'S MAGAZINE, but you asked for it.

Got my runnin' orders at Norwood, Missouri, in 1886. Lived on a hill forty with the old folks. Attended the country school four months a year. Got my education—chopping cordwood, cutting post oak sprouts and dodging grubs behind a bull-tongue plow. Folks, if you never tried to drive a wooden "glut" with a hickory maul into a blackjack log that squirms like an eel on a hot pan when you hit it, nor ever had a broken hickory grub an inch through fly back and crack yuh on the shin, you don't know why we Ozark hill-billies go either school-teaching or railroading as soon as we are old enough.

My cronies were hero worshipers. Alongside Washington and Lincoln, we placed the train and engine men on "55" and the rest; and if we could get one of the reckless daredevils who ran those hogs down on the Ozark to wave at us, we'd boast of it for a month. I can't remember when we didn't all know the signals, didn't waste elbow grease giving night signs with the old hayburner lantern, and didn't swear one and all to be railroaders. Most of us have.

My brother went braking for the K. C., F. S. & M. when I was fifteen. I wanted to go early, but being the youngest of the family I was compelled by sense of filial duty to stay home and take care of the old folks.

I taught school at nineteen and again at twenty. Sneaked away in 1907 and worked on the Mo. P. out of K. C—never let the old folks know what I was doing. Later I taught school, clerked, ran a cream station, chopped and hauled cordwood. Married in 1911, graduated from high school in 1913, and reconciled myself to teaching.

In the spring of '18, gave up my teaching position in Sparta, Missouri, and went braking on the Frisco. Happy? Thought I was settled for life, but when the slump came and the boys came back in the summer of '19, I was laid off and had to go picking strawberries in Arkansas to keep the wife and kiddies from starving. This caused me to accept a position teaching in Kansas, and though I worked the summer of '20 out of Kansas City, I returned to a teaching position in New Mexico.

I am at present making wheel reports and switch lists on a school in a small town in the foothills of the Rockies. I like my job, but I never see a train go by that I don't look out at it and think that I might have been a hogger or a pencil-pusher if luck hadn't been against me.

About all my blood kin are working for a railroad. Some of the best friends I ever had are railroaders, and in spite of the hardships which go with chaining up drawbars on night

E. S. DELLINGER

drags when it's raining like pouring it out of a boot, and with packing hot boxes when it's ten below, there is no other work which has the fascination of the rail I have always harbored the idea of telling tales of the men and incidents which had thrilled me ever since I could remember. That's why, when I'm not drowning worms in a trout stream or throwing lead into a duck pond, I take up the slack by railroading with a typewriter.

CALL FOR EMMET F. HARTE

Emmet, where are you? We've been trying to find the address or something of the whereabouts of one Emmet F. Harte, last heard of on a rural route in the vicinity of St. Joe, Missouri. If you will remember, Emmet did quite a bit of authoring in former times and he made a great success with "Honk and Horace," an inimitable pair in railroading. Now we have received some letters recently, and the letters are from readers who insist that Honk and Horace be marked up again, so we are going to ask you fellows to help us find Emmet, because wherever Emmet is there will be found Honk and Horace.

Here is one appeal:

EDITOR RAILROAD MAN'S MAGAZINE:

My support goes to you, sir. Here's hoping we again meet our old friends Honk and Horace, Butch Poteet, the Arbuthnot sisters, et al., and please don't jump from old times to the present when giving us the lowdown on Valhalla. Let's move up gradually, enjoying life there every time, at least as we did in the old days.

After Honk and Horace built their railroad in the tropics I hope they returned to the old town and have been there ever since.

With many thanks for the pleasant hours I enjoyed with the old book, and best wishes for the success and long life of the new and the staff in charge, may this railroad man remain

HAROLD R. BROWNYER,
Detroit, Mich.

And here's another:

EDITOR RAILROAD MAN'S MAGAZINE:

Hello, there—glad to see your revival Have shown your first reissue to quite a few railroad friends and nearly all of them voluntarily remarked about the good old Honk and Horace and Observations of a Country Station Agent days. Make your magazine as good as the old days and it will come right along

H. E. R
Buffalo, N. Y.

AND A CALL FOR "J. E. M."

EDITOR RAILROAD MAN'S MAGAZINE:

This is one day that a fellow certainly can be thankful for many wonderful, splendid gifts given to us during this prosperous age. The other afternoon, feeling there was nothing doing around the house, I took a walk over to the cigar store and behold, I was nearly staggered when I glanced up to a row of magazines and saw the good old-timer back with us again—the RAILROAD MAN'S MAGAZINE. Boy, what a thrill that was—just like meeting an old friend. I bought the book, feeling a little doubtful that it was the same old pal, but after looking over the pages and then recalling some of the old-timers that used to write for the magazine, I came to the conclusion that it was the same old friend without the red cover.

Being an old-time telegrapher, who formerly worked on the Philadelphia and Reading and the Central of New Jersey, the RAILROAD MAN'S MAGAZINE has brought happy hours to me. The stories I enjoyed most were those signed by "J. E. M." Good old telegraph stories, stories that rang true to every brass-pounder. So let me wish you the best of luck in your new venture, and you can just bet I will be a reader to the end

WILLARD J. HOPKINS,
Philadelphia, Pa.

Also Spike Malone, which means that some of you readers will have to help us locate John C. Russell if he still roams the main lines of this world.

EDITOR RAILROAD MAN'S MAGAZINE:

Just received my long waited for prize magazine, and when you have Honk and Horace with their medicine house, Spike Malone and the brain teaser page, our train sheet will be complete.

Now I would like to ask some of the old A. E. F. rails to come across with some of the old Bordeaux District experiences. I, for one, had many, but have no talent to make the story entertaining, but there were some

of the boys at Bassens Camp I can bank on Let's go!

H. N.,
Marion, Ohio

And now here is an ex-rail who is glad to see our signals:

The other evening I stopped at a newsstand on Columbus Avenue and the first thing that caught my eye was RAILROAD MAN'S MAGAZINE, and I saw that it was Vol. I, No. 1.

Some years ago, I have forgotten how many, I was a constant reader of the old RAILROAD MAN'S MAGAZINE. At that time I was in the transportation department of the C. & O. in Richmond. If you would care some time to refer back to your bound volumes you will find two contributions from me—one on the workings of the car record office, and another called "What is a Ton Mile?"

Glad you're back, and although not on a railroad now, I'll enjoy each issue very much.

F. W. E.
Boston, Mass.

OUR OWN LANGUAGE

We have had a number of requests from various sections of the country asking us to print an up-to-date list of railroad slang and semitechnical terms such as are used in the operating departments of the various roads. We are accordingly obliging with the following, but, at the same time, we want to make this as complete as possible, and any readers who can supply words and definitions which we have not set forth, are invited to write in.

AGE—Term of time in service, usually referring to seniority.

ARTIST—A general term usually referring to some workman, particularly adept, and usually with such prefix as brake, pin, speed, etc.

BAKEHEAD—Locomotive fireman.

BATTLESHIP—Usually referred to the superheater type or any large locomotive

BIG HOLE—Emergency position of the air brake valve; the act of abruptly applying brakes to the full reduction

BIG HOOK—Wrecking crane

BIG OX—Conductor of either freight or passenger.

BLACK DIAMONDS—Company coal.

BLOW UP—To quit a job suddenly

BOOMER—The drifting type of railroad man who travels from road to road, and stays but very little time any place. The term was derived from the pioneer days of railroad booms along new frontiers and originally was applied to men who followed these boom camps

BOARD—A fixed signal regulating railroad traffic and usually referred to as slow board, order board, clear board (for clear tracks), or red board (stop)

BRASS COLLAR—Applied to members of the official family.

BRASS HAT—A term applicable to officials.

BRASS-POUNDER—A telegraph operator

BUGGY—Caboose; passenger car; box car

BULL—Special agent or railroad police officer.

BULLGINE—Steam locomotive

CAGE—Caboose.

CALLER—Employee whose duty it is to call out a train and engine crews.

CALLIOPE—Steam locomotive.

CAPTAIN—A term applied to conductor, either passenger or freight

CAR TOAD—Car repairer; there are many variations of this word; viz: car knock, car tonk, car whack, etc

CHARIOT—Sometimes applied to passenger cars, but most frequently to cabooses.

CINDER CRUNCHER—A switchman

CLOWN—A switchman or a yard brakeman

CLOWN WAGON—Caboose

CLUB WINDER—Switchman or brakeman

CRIB—Caboose

CRUMMY—Caboose

CUPOLA—The observation tower on a caboose

CUSHIONS—A term referring to passenger cars

DEADHEAD—Fireman's vernacular for brakeman; employee riding over the road on company pass and on company business.

DECK—The floor part of a locomotive cab

DECORATE—The act of riding on top of freight cars as required on mountains or passing stations on certain railroads

DETAINER—Usually applied to the train despatcher.

DIAMOND CRACKER—Fireman

DICK—Railroad detective

DOG HOUSE—Caboose

DRAG—A heavy train of dead freight

DRINK—To take water for the locomotive

DYNAMITER—A car on which a defective air mechanism sends the brakes into full emergency when only a service application is given from the engine

EAGLE-EYE—Locomotive engineer.

END MAN—The brakeman or rear brakeman, usually on freight train.

FIREBOY—Locomotive fireman.

FLAG—To work under an assumed name.

FLAT—A freight car.

FOG—Steam.

GANDY DANCER—Track laborer

GANGWAY—The space between the rear cab post of a locomotive and the tender.

GARDEN—A freight yard.

GATE—A switch.

GOAT—A yard engine.

G. M.—General manager.

GON—A gondola or steel-sided, flat bottom coal car

GO HIGH—The act of decorating or climbing to the top of box cars to receive signals or to transmit signals or to apply hand brakes

HACK—Another term for caboose.

HAM—A telegraph operator. Usually referred to one of a poorer variety.

HEAD MAN—The brakeman who, on freight trains, rides the engine.

HEAD PIN—The head brakeman.

HEARSE—Caboose

HIGHBALL—Signal waved by the hand or by lamp in a high, wide semiarc, the meaning of which is to get out of town at full speed ahead.

HIGHBALL ARTIST—A locomotive engineer who is noted for fast running

HIGH IRON—The main line or the high speed track of a system of main tracks.

HOG—A locomotive.

HOGGER—A locomotive engineer.

HOGHEAD—A locomotive engineer.

HOG LAW—The federal statute which provides that all train and engine crews tie up after sixteen hours of continuous service.

HOPPER—A steel-sided coal car with a hopper bottom which allows the unloading from that point.

HOT SHOT—A fast train of any class Sometimes called a highball run.

HUMP—An artificial knoll at the end of a classification yard over which cars are pushed to be allowed to roll to separate tracks on their own momentum

HUT—A term sometimes applied to a caboose and sometimes applied to the cab of a locomotive

IRON SKULL—A boiler maker.

JACK—Locomotive

JUGGLER—A term applied sometimes to members of the train crew of way freight runs, whose duties require them to load and unload less than carload freight at station stops.

KANGAROO COURT—A hearing in which matters of main line mix-ups are investigated and disposed of.

KETTLE—A locomotive.

KICK—Applied to switching; the act of pushing a car or cars at speed ahead of or behind an engine, and then suddenly cutting the car or cars loose from the engine while the brakes are applied quickly to the engine, thus allowing the cars to be kicked free.

KING—Freight conductor—sometimes applied to the yard master.

KING SNIPE—Foreman of track gang.

LADDER—The main track of a system of tracks which comprise a yard and from which each individual track leads off. This is also called a lead.

LEAD—See ladder.

LIGHTNING SLINGER—Telegraph operator.

LOUSE CAGE—Caboose.

LUNG—Drawbar.

MAIN IRON—Main track.

MAIN PIN—An official.

MAIN STEM—The main line

MANIFEST—Fast freight, usually made up of merchandise and perishables.

MASTER—Conductor.

MASTER MANIAC—The master mechanic.

MASTER MIND—Sometimes applied to train master, yard master and conductor, also the train despatchers.

MILL—Steam locomotive; typewriter.

MONKEY HOUSE—Caboose.

MUDHOP—Yard clerk.

NON-AIR—A non-union railroad worker.

NO-BILL—Non-air employee.

NUT SPLITTER—Machinist

OP—A telegraph operator

O. R. C.—A conductor.

ORDER BOARD—A fixed signal to indicate to approaching trains whether to pick up train orders or to proceed

PALACE—A term applied to the caboose.

PARLOR—Caboose.

PARLOR MAN—The hind brakeman or flagman on a freight train

PIG—Locomotive.

PIG MAULER—Locomotive engineer.

PIN—Sometimes applied to a brakeman

PINHEAD—Applied to brakeman.

PULL THE PIN—To resign, or quit a job.

PUTTY—Steam

RAIL—A railroad employee. Usually referred to men in transportation service.

RATTLER—A freight train.

RAWHIDER—A conductor or engineer who is especially hard on men and equipment. This term is chiefly applied to engineers who punish locomotives to the limit without getting satisfactory results

RED BALL—Fast freight

RED BOARD—Fixed signal at stop.

REEFER—Refrigerator car.
RINGMASTER—Yard master.
SCISSOR-BILL—Applied to either yard or road brakeman and a term which is not considered complimentary.
SHACK—A brakeman.
SHANTY—A caboose
SLAVE DRIVER—Yard master.
SMART ALEC—Conductor
SMOKER—Locomotive.
SNAKE—Switchman
STICK—A staff used on certain stretches of track for the purpose of controlling the block It is carried by engine crews from one station to another
STINGER—Brakeman.
STOKER—Fireman
STUDENT—A learner in either telegraph, train or engine service.
SUPER—A superintendent
SWELL HEAD—Conductor.
TALLOWPOT—Locomotive fireman
TANK—Locomotive tender
TEAKETTLE—Usually applied to leaky old locomotives.
THOUSAND MILER—A starched blue shirt with an attachable starched blue collar of deep hue, worn by railroad men universally and especially an insignia of rank among boomers of a bygone era.
TIE 'EM DOWN—To set hand brakes.
TRAIN DETAINER—Train despatcher.
TRAVELING MAN—Usually applied to the traveling engineer or the traveling fireman
TRIP—The course of a tour of duty from one terminal to another and return
VARNISHED WAGONS—Passenger train equipment.
WAGONS—See buggies.
WASHOUT—A stop signal waved violently by using both arms and swinging them in a downward arc by day, and swinging a lamp in a wide, low semicircle across the tracks by night
Y' M.—Yard master.

A MESSAGE TO AUTHORS

It is evident from the efforts of a great number of authors whose work is passing over our desk, that many are seeking to break into this magazine without a full knowledge of railroading to back up their literary efforts. We need stories, both fiction and feature, and we will go a long way to help an author make good, provided his submitted efforts are convincing enough to us that he has some stuff. We do wish, however, that all authors, if they do not know the railroad, would find something out about it before they begin to incorporate it into fiction.

The other day a story came in from a very well known popular writer. He had a situation where the limited was beyond the last open telegraph office and running headlong toward a bridge washout. The author then had a man from the roundhouse follow the limited with an engine in an effort to stop him before the limited plunged into the creek, and with all of this, the author then had the pursuing engineer telling how close he was to the limited by the position of the automatic blocks. It would take but a moment's thought, if a person knew anything about railroading, to know that the washout of the bridge would set the red against the limited, and it would be totally unnecessary for any engine to pursue that train to notify it of its danger.

In another instance, an author had a freight train come down the side of a mountain on a three per cent grade. He had a stop and had the train crew tie down a few hand brakes, cut off the engine and go into a mine spur, to be gone fifteen or twenty minutes. The author then had the villain, who was seeking revenge on the railroad, rush out of the underbrush, throw off the hand brakes and start the train down the side of the mountain into the town below. If this author had investigated, he would have found that it would have been necessary for his villain to bleed off the air on every single car, or at least on enough of them to get that drag moving. This could not have been accomplished before the engine came back for its train.

A favorite theme with authors seems to be the runaway on the mountainside. Every other story has a situa-

tion where a train of cars has broken loose on a hill, or where a veteran goes down for pensioning and then by some twist or another is reinstated in the main line service.

Remember we want to help all writers wherever we can, and remember, too, that no writer can get anything which contains bad railroading by these gates.

THE BOOMERS' CORNER

The first roving son to write and make himself acquainted with the conductor of this department and to call upon this department for service, is brother R. E. Campbell, former member of the B. R. T. Lodge No. 57 and B of L. F. & E. Lodge No. 261. This is what he has to say:

DEAR BOOMER:

I have to-day got my copy of the RAILROAD MAN'S MAGAZINE and it seems like a lost relative has come back. I have surely missed this magazine and the Spike Malone stories, but I have placed my order with the newsstand for future copies. I remember the red cover at the start of the war and the statement: "Wanted Railroad Men, Engineers, Firemen, Brakemen, Switchmen and Conductors for service of our country."

So I enlisted, went to Ft. Benjamin Harrison, Indianapolis, Indiana, and after eight days was sent to Camp Upton, Long Island, and after four days at that point they sent me to France, where I was assigned to the 140th Company Transportation Corps, as an engineer. I ran the 43 spot and the 565 between Sommeille and Verdun, and later between Verdun and Audun le Roman

I hope to see and hear from the boomers who felt as I did and went to France. Some thrill. I was under Colonel N. L. Howard, lately President of the Chicago-Northwestern Railroad.

R. E. CAMPBELL,
Box 199, Brookfield, Missouri.

NOW THE COUPON

Remember what we said last month—that three of these filled out in a row, with your likes and dislikes expressed thereon and your choice of any original drawing appearing in any one of the three issues of RAILROAD MAN'S MAGAZINE, will result in your getting the said drawing by return mail? This is the coupon and it is up to you to use it.

"HERE'S MY VOTE"

Editor,
RAILROAD MAN'S MAGAZINE,
280 Broadway, N. Y. C., N. Y.

The stories I like best in this issue of the magazine are as follows:

1.....

2.....

3.....

4.....

I did not like.....

because.....

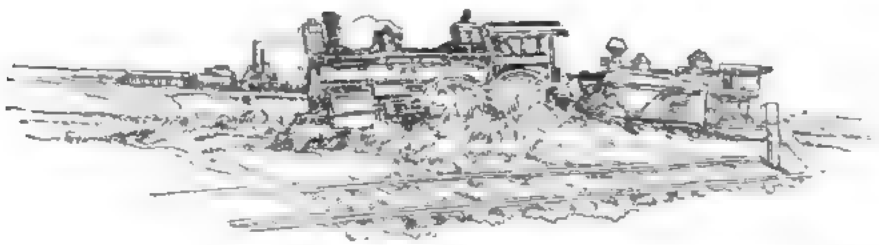
Name.....

Occupation.....

Street.....

City.....*State*.....

[1]



He Mailed a Coupon Like This!

KRISS-KROSS CORPORATION, Dept. A 3964
1418 Pendleton Ave. St. Louis, Mo.

Address...
City

[ ] Check here if interested in agency

-and it Brought Him

1129 Cool Shaves *from One Single Blade!*

Another Triumph For KRISS-KROSS. The Most Amazing Shaving Invention Ever Patented! Mr. T. Liddle, Of Illinois, Wrote Recently, "I Have Been Using One Of Your Strappers Since May, 1924. I Shave Every Morning And I Am STILL ON MY FIRST BLADE!" Read Astonishing Details, Then Act At Once For Real Shaving Joy.

NO wonder KRISS-KROSS marks such a radical advance in shaving ease and economy. For now at last it has captured a secret that has baffled men for years! It actually reproduces mechanically the diagonal flip-flop master barber's stroke that gives razor blades the keenest cutting edge that steel can take. Pressure decreases automatically. And you who have used are ready for the coolest, slickest shave you ever had.

GET FREE OFFER

And now, to introduce this marvelous device that makes shaves better than you ever dreamed possible, we are offering a limited number of Outfits at a special introductory price. Send coupon for full details about this amazing offer. No obligation. Just fill out and mail the coupon now.

KRISS-KROSS CORPORATION
1418 Pendleton Avenue
Dept. A-3964, St. Louis, Mo.

AGENTS

KRISS-KROSS CORPORATION represents a chance to make $100 to $300 a week. Write at once for our liberal proposition. Just mail the coupon below for full details.

Travel On "Uncle Sam's" Pay Roll

$1900 to $2700 A YEAR

Men 18 to 35

Mail Coupon Today Sure

Railway Postal Clerks

COUPON

Franklin Institute Dept. F 240 Rochester, N. Y.

Address

He Left His Calling Card

—Telltale Finger Prints!

Written In Blood!

Three bloody finger prints on the cash register! He might as well have left his calling card—his doom was already written! Get this gripping story FREE, with 12 others just as exciting!

13 True Detective Stories FREE!

Gripping Mysteries! Gruesome Tragedies! Hair-Raising Climaxes! Every story a thrill! Think of it! Real Secret Service Operators give you "inside dope" on real crime cases. Mail coupon quick!—and get these stories FREE!

$2500—$10,000 a Year

Finger Print Experts solved every one of these weird, blood-curdling crimes—and got the big rewards! Every day more and more trained men are needed. Opportunities are unlimited!

The knock of opportunity is the knock of the postman as he brings you this book, "Finger Prints." It brings you fascinating true detective stories—it tells you how YOU can become a Finger Print Expert quickly and easily in your spare time at home! YOU can make $2500 to $10,000 a year in this thrilling profession!

Institute of Applied Science
1920 Sunnyside Ave., Dept. 65-61 Chicago, Ill.

Mail This NOW for Free Book

Institute of Applied Science, Dept. 65-61
1920 Sunnyside Ave., Chicago, Ill.

Without any obligation whatever, send me your new fully illustrated FREE book of authentic detective tales, "Finger Prints"; also full particulars about your Low Prices and Easy Terms.

Name .....

Address .....

City and State ..... Age .....

Science Explains the Conservation of Youth... *After 40!*

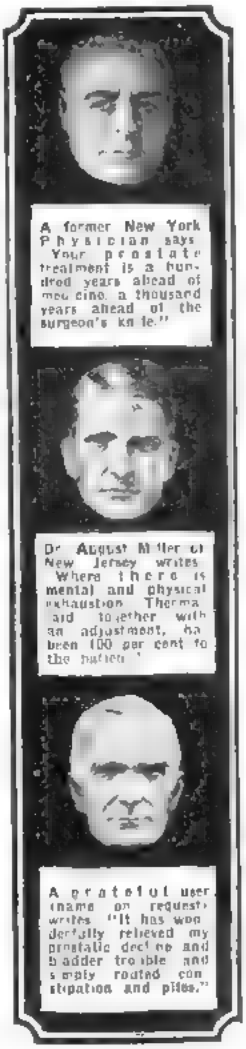
A WELL known scientist's new book about old age reveals facts which to many men will be amazing. Did you know that two-thirds of all men past middle age are said to have a certain seldom mentioned disorder? Do you know the frequent cause of this decline in vitality?

Common "Old Age" Symptoms

Medical men know this condition as hypertrophy of the prostate gland. Science now reveals that this swollen gland —painless in itself—not only often cheats men of health, but also bears on the bladder and is often directly responsible for sciatica, backache, pains in the legs and feet, and dizziness. When allowed to run on it is frequently the cause of cystitis, severe bladder inflammation.

65% Are Said to Have This Gland Disorder

Prostate trouble is now reached immediately by a new kind of safe home hygiene that goes directly to the gland itself, without drugs, medicine massage or application of electricity. Absolutely safe. 50,000 men have used it to restore the prostate gland to normal functioning. The principle involved is recommended by many physicians. Amazing recoveries often made in six days. Another grateful effect is usually the immediate disappearance of chronic constipation Usually the entire body is toned up. Either you feel ten years younger in six days or the treatment costs nothing.


A former New York Physician says "Your prostate treatment is a hundred years ahead of medicine, a thousand years ahead of the surgeon's knife."
Dr. August Miller of New Jersey writes "Where there is mental and physical exhaustion Thermal aid together with an adjustment, has been 100 per cent to the patient."
A grateful user (name on request) writes "It has wonderfully relieved my prostatic decline and bladder trouble and simply routed constipation and piles."

Send for FREE Book

If you have gland trouble, or any of the symptoms mentioned, write today for scientist's free book, "Why Many Men Are Old at Forty." You can ask yourself certain frank questions that may reveal your true condition. Every man past forty should make this test, as insidious prostate disorder often leads to surgery. This book is absolutely free, but mail coupon immediately, as the edition is limited. Address

ELECTRO THERMAL COMPANY

3925 Morris Ave., Steubenville, Ohio

If you live west of the Rockies, mail your request to The Electro Thermal Co. of Van Nuys Branch, Dept 39-B

LOS ANGELES, CALIFORNIA

The Electro Thermal Company,
3925 Morris Ave., Steubenville, Ohio.

Please send me FREE and without obligation, a copy of your booklet, "Why Many Men Are Old at 40." Mail in plain wrapper

Name ....

Address ....

City ....

State ....

OPPORTUNITIES IN

traffic management

Conditions point to an unusual demand for trained traffic men by transportation companies and industrial organizations. Men with scientific traffic training effect big savings for their firms—command big salaries.

Three Detroit Firms Pay Their Traffic Managers Over $20,000 a Year

Prepare at home in your spare time, under supervision of traffic experts. Low cost—easy terms. "This training helped me cut shipping costs for my firm and my salary increased more than 100%," writes W. H. Story, Traffic Manager, American Seeding Machine Co., Springfield, O. Send for 64-page book.

This Book FREE

LaSalle Extension University
Dept. 179-T Chicago

Styled-On-Fifth-Ave.

TIES PAY BIG

MAKE STEADY MONEY

with this great line—the best paying full time or spare time proposition in the country! You collect liberal commissions in advance.

FINEST TIE LINE IN AMERICA

Beautiful Fifth Avenue patterns. Sturdy, long wearing fabrics. Ties to fit every taste. Sell on sight to men and women at direct from factory prices. Write for big new Spring Outfit, sent absolutely FREE. Start earning big money immediately.

PUBLIC SERVICE MILLS, INC., 515 Y 30th Street, North Bergen, N. J.
Canadian Agents apply to 110 Dundas St., London, Ontario, Canada.

QUALIFY for the I.C.C. BAR

Law regulates every railroad activity. Study transportation law and make yourself more valuable to your company. The Interstate Commerce Commission issues certificates admitting to practice those who have the necessary legal and technical qualifications and are properly sponsored. You can qualify in 18 months spare time study of our transportation law reference texts. FEDERAL REGULATION OF COMMERCE. Degree of Bachelor of Transportation Law awarded. Low monthly terms. Write today for free literature.

BLACKSTONE INSTITUTE Transportation Law Division T-91
307 N. Michigan Avenue Chicago, Ill.

CORRECT Your NOSE!

Improve your appearance with the ANITA NOSE ADJUSTER. Shapes flesh and cartilage—quickly, safely and painlessly, while you sleep. Results are lasting. Doctors praise it. 68,000 users. Write for 30-Day TRIAL OFFER and FREE BOOKLET.

ANITA INSTITUTE, 192 Anita Building, Newark, N. J.

When you start a serial in the ARGOSY you only wait a week to go on with it. Start one this week, and you'll buy every number until it's concluded.

SELL ROSECLIFF SHIRTS

Make Steady Money

Showing Samples Men's Shirts Ties, Underwear brings you big cash commissions. One Year Guarantee. No substitutions. Free silk initials. More exclusive Rosecliff features establish leadership. Write for your FREE Outfit NOW!

YOUR OWN SHIRTS and TIES

ROSECLIFF SHIRT CORP.
Dept. RM-1
1237 Broadway, N. Y.

Outfit Free

Over the Mountains from Los Angeles 559 Miles on 11 Gallons of GAS

Think of it! FIVE HUNDRED FIFTY-NINE MILES over rough mountainous country burning only ELEVEN GALLONS OF GASOLINE. Imagine more than FIFTY MILES TO THE GALLON. That is what the WHIRLWIND CARBURETING DEVICE does for D. R. Gilbert, enough of a saving on just one trip to more than pay the cost of the Whirlwind.

THE WHIRLWIND SAVES MOTORISTS MILLIONS OF DOLLARS YEARLY

Whirlwind users, reporting the results of their tests, are amazed at the results they are getting. Letters keep streaming into the office telling of mileages all the way from 22 to 50 miles on a gallon, resulting in a saving of from 25% to 50% in gas bills alone.

Mark A. Estes writes: "I was making 17 miles to the gallon on my Pontiac Coupe. Today, with the Whirlwind, I am making 35 5-10 miles to the gallon."

P. P. Goerzen writes: "31 6-10 miles with the Whirlwind, or a gain of 21 miles to the gallon."

R. J. Tulp: "The Whirlwind increased the mileage on our Ford truck from 12 to 26 miles to gallon and 25% in speed."

Car owners all over the world are saving money every day with the Whirlwind, besides having better operating motors. Think what this means on your own car. Figure up your savings—enough for a radio—a bank account—added pleasures. Why let the Oil Companies profit by your waste? Find out about this amazing little device that will pay for itself every few weeks.

FITS ALL CARS In just a few minutes the Whirlwind can be installed on any make of car, truck or tractor. It's actually less work than changing your oil, or putting water in the battery. No drilling, tapping or changes of any kind necessary. It is guaranteed to work perfectly on any make of car, truck or tractor, large or small, new model or old model. The more you drive the more you will save.

SALESMEN AND DISTRIBUTORS WANTED
Free Sample and $100.00 a Week Offer

Whirlwind men are making big profits supplying this fast selling device that car owners cannot afford to be without. Good territory is still open. Free sample offer and full particulars sent on request. Just check the coupon.

GUARANTEE No matter what kind of a car you have—no matter how big a gas eater it is—The Whirlwind will save you money. We absolutely guarantee that the Whirlwind will more than save its cost in gasoline alone within thirty days, or the trial will cost you nothing. We invite you to test it at our risk and expense. You are to be the sole judge.

FREE TRIAL COUPON

WHIRLWIND MFG. CO.
999-346-A Third St., Milwaukee, Wis.

Gentlemen: You may send me full particulars of your Whirlwind Carbureting device and free trial offer. This does not obligate me in any way whatever.

Name.....

Address.....

City.....

County..... State.....

Check here if you are interested in full or part time salesman positions.

Get Strong QUICKLY

Giant Chest Expander ONLY $2.00

Here's an opportunity for everyone to develop big muscles and obtain great strength by using this heavy-tensioned PROGRESSIVE EXERCISER, adjustable from 20 to 460 lbs. resistance. Complete instructions with each exerciser.

Made in four convenient sizes, depending upon the strength you desire. 5 cables for only $2; 10 cables for $4. Write us today. Every exerciser fully guaranteed.

Simply pay the postman plus a few cents postage upon delivery. In writing specify how many cables you desire. Money back in five days if dissatisfied.

SEND NO MONEY!

PROGRESSIVE EXERCISER COMPANY
Dept. 1701, Langdon Building, Duane Street and Broadway, New York City

Buy a Watch the Modern Way

This 21 Jewel Santa Fe Special

Sent You On Approval

Wear 30 days Free!

Thank you for making it possible for me to own a 21-jewel Santa Fe Special, write thousands of our customers.

Buy Direct

Our catalogue is our showroom. Any watch will be sent for you to see without one penny down. No obligation to buy.

Save 1/3 to 1/2

on the price you pay for a similar watch made by other Manufacturers. Most liberal offer. Our "Direct to You" offer and Extra Special Distribution Plan is fully explained in the New Santa Fe Special Booklet just off the press. The "Santa Fe Special" Plan means a big saving of money to you and you get the best watch value on the market today.

Railroad Accuracy
Beauty Unsurpassed
Life-long Dependability

—all are combined to the highest degree in the famous "Santa Fe Special" Watch.

These watches are now in service on practically every railroad in the United States and in every branch of the Army and Naval service. Thousands of them are distributed around the world. You will never miss the few cents a day that will make you own one of these watches.

Just Out! Send coupon for our New Watch Book—Just off the press. All the newest watch case designs in white or green gold, fancy shapes and thin models are shown. Read our easy payment offer. Wear the watch 30 days FREE.

Ask for Our Special Cash Price. Offer Good for 30 Days Only.

SANTA FE WATCH CO.

153 Thomas Bldg. Topeka, Kans.

SANTA FE WATCH CO., 153 Thomas Bldg., Topeka, Kansas.

Please send me absolutely Free your New Watch Book ( ) Diamond Book ( )

Name.....

Address..... State.....

Hooked Up! Latched Wide!

Balling the Jack With a Full Tonnage of Detective, Crook, and Murder Mystery Stories.

Superior by Class, Direction and Rights!

JANUARY

Is a Big Month For Readers of the Nation's Best Detective Magazine.

HERE'S WHY!

JANUARY 4th

"LURE OF THE POPPY"
By Steuart M. Emery

JANUARY 11th

"THE DOUBTFUL EGG"
By Erle Stanley Gardner

JANUARY 18th

"THE GREEN RIBBON"
By Edgar Wallace
(The Mystery Master's Newest Novel)

JANUARY 25th

"SUSPICION of MURDER"
By Victor Maxwell

These are just the headliners; just the "first sections." In addition there are thrilling and gripping mystery stories by such leading detective fiction writers as EDWARD PARRISH WARE, FRED MACISAAC, J. ALLAN DUNN, DON H. THOMPSON, ROBERT H. ROHDE, CHARLES SOMERVILLE, HAROLD DE POLO, JOHN L. TIERNAN and others in the same issues.

AND ALL FOR 10 CENTS A COPY! You cannot afford to let ten cents stand between you and this interesting magazine.

DETECTIVE FICTION

WEEKLY

(FORMERLY FLYNN'S)

On Sale Every Wednesday

Mills Leonard on the job

"How many first attempts at feature-story writing find their way to the first page of the magazine section of a Sunday newspaper as mine did?

"The personal touch that each of my assignments received as it passed over the N. I. A. copy desk accounts for the success I have had.

"I am determined now to keep on writing—and go South winters."

MILLS C. LEONARD
706 Blaine St.
New Castle, Pa.

Writing—a source of income that many people neglect

MANY people who *should* be writing never even try it because they just can't picture themselves making "big money." They are so awe-struck by the fabulous stories about millionaire authors that they overlook the fact that $25, $50 and $100 or more can often be earned for material that takes little time to write—stories, articles on home or business management, sports, travels, recipes, etc.—things that can be easily and naturally written, in spare time.

You, too, can learn to write How? By WRITING

The Newspaper Institute of America offers an intimate course in practical writing—a course as free from academic "isms" and "ologies" as a newspaper office—a course as *modern* as the latest edition of this morning's paper.

Week by week, you receive actual assignments—just as if you were right at work on a great metropolitan daily. Your writing is *individually* corrected and constructively criticized. A group of men with 182 years of newspaper experience behind them are responsible for this instruction. Under such sympathetic guidance, you will find that (instead of vainly trying to copy some one else's writing tricks) you are rapidly developing your own distinctive, self-flavored style. You are learning to write by writing—acquiring the same experience to which nearly all well-known writers of short-stories, novels, magazine articles, etc., attribute their success.

How You Start

To insure prospective student-members against wasting their time and money, we have prepared a unique Writing Aptitude Test. This tells you whether you possess the fundamental qualities necessary to successful writing—acute observation, dramatic instincts, creative imagination, etc. You'll enjoy this test.

NEWSPAPER INSTITUTE OF AMERICA
1776 Broadway **New York**

Newspaper Institute of America
1776 Broadway, New York

Send me, without cost or obligation, your *Writing Aptitude Test* and further information about writing for profit, as promised in Railroad Man's for January.

Mr.
Mrs.
Miss .....

Address .....

(All correspondence confidential. No salesmen will call on you.) 18A200

When the table talk turns to cigarettes —

the men smile quietly and say: "To smoke Camels is to know the real pleasure of smoking."

The preference of experienced smokers has made Camels by far the most popular cigarette in the United States.

Camel

CIGARETTES

© 1930, R. J. Reynolds Tobacco Company, Winston-Salem, N. C.